SAAELIP AUTHORITY PORTAL – USER GUIDE

South Africa Department of Environmental Affairs (DEA)

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1 Overview of SAAELIP

SAAELIP is a One-Stop Portal designed to provide single sign-on entry for Atmospheric Emission Licensing and Air Emission Inventory Reporting to regulated community and Authorities, and also to support the general public to query environmental data of their interests.

(A) <u>For DEA and Local Authorities:</u>

SAAELIP will serve as a central platform for the DEA to review submissions, license management, compliance monitoring, and authority performance monitoring. SAAELIP offers the authority users the following functionality:

- Process and assess submissions, as well as track status at every step of the work flow
- Approve or deny submissions
- Manage license status and issue licenses
- Create and accept paper submissions
- Manage inspections and results
- Provide performance metrics reporting tools
- Manage facility and authority users

(B) <u>For the Regulated Community:</u>

SAAELIP will serve as a central platform for the facility to manage license applications, licenses, reporting requirements, and compliance reports. SAAELIP offers online options for a wide spectrum of submittals, including:

- Environmental Licensing
  - Apply new licenses
  - Amend licenses
  - Renew licenses
  - Terminate licenses

- Environmental Reporting
  - Submit compliance reports and monitoring data
  - Submit annual emission inventory reports and emission data

1.1 *Definitions, Acronyms, and Abbreviations*

This subsection provides the definitions of all terms, acronyms, and abbreviations required to properly interpret the User Guide.

Term	Definition
SAAELIP	South African Atmospheric Emission Licensing & Inventory Portal. The portal provides a single sign-on access to SNAEL and NAEIS systems.
SNAEL	System for National Atmospheric Emission Licensing (SNAEL) System
NAEIS	National Air Emission Inventory System of South Africa, under the SAAQIS II project
DEA	Department of Environmental Affairs
AEL	Atmospheric Emission License
EI	Emission Inventory
AQO	Air Quality Officer
ACO	Accounting Officer
ECO	Emission Control Officer
ESA	Electronic Signature Agreement

Term	Definition
PIN	Personal Identification Number
AELA	Atmospheric Emission Licensing Authority
LA	Licensing Authority

1.2 *Prerequisites*

In order to use the SAAELIP system, the user will need the following:

- Internet connection
- IE 7.0 or higher
- PDF file Viewer (for viewing PDF files only)

2 Overview of Business Processes in SAAELIP

In order to utilize SAAELIP, the user needs a firm grasp of certain business processes to effectively utilize the modules. This section provides a high level overview of the business processes supported by SAAELIP.

2.1 *Accounts and Security Management*

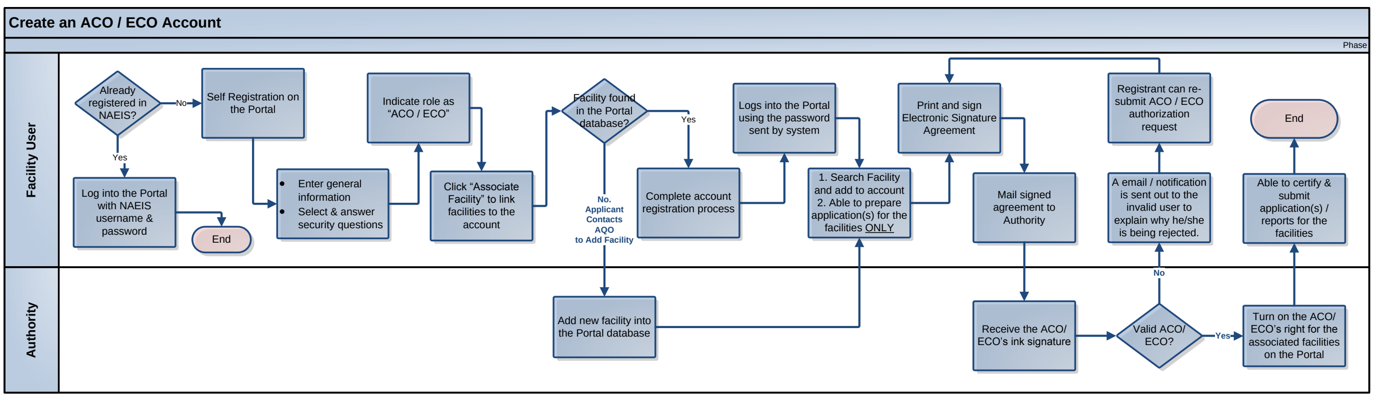
To use SAAELIP, accounts must be first set up so that users can access SAAELIP. There are two different sets of accounts that SAAELIP manages:

- Facility
- Authority

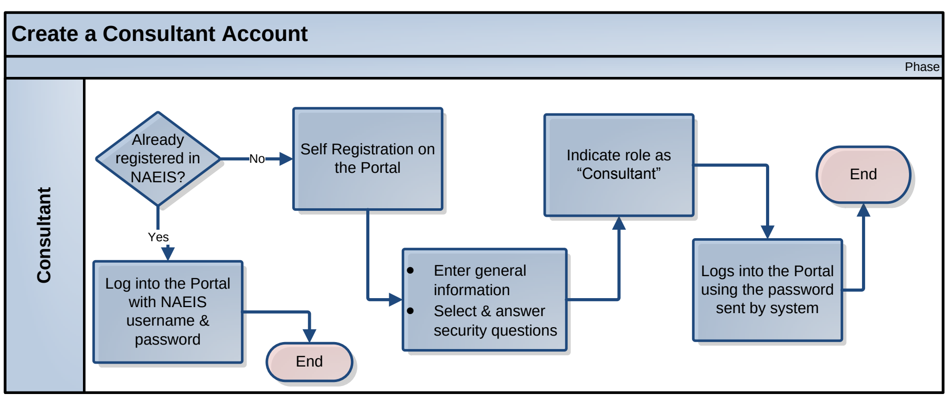
2.1.1 Facility Account Creation

The facility accounts can be created and accessed through the SAAELIP facility portal but the users are managed through the authority portal. The authority can also create facility users. In addition, the authority is responsible to approve/disable facility associations and add facilities that are not currently in the database. In order to approve user accounts, the Licensing Authority will need to receive a signed subscriber agreement. Without approved facilities, the facility user cannot submit applications in SAAELIP.

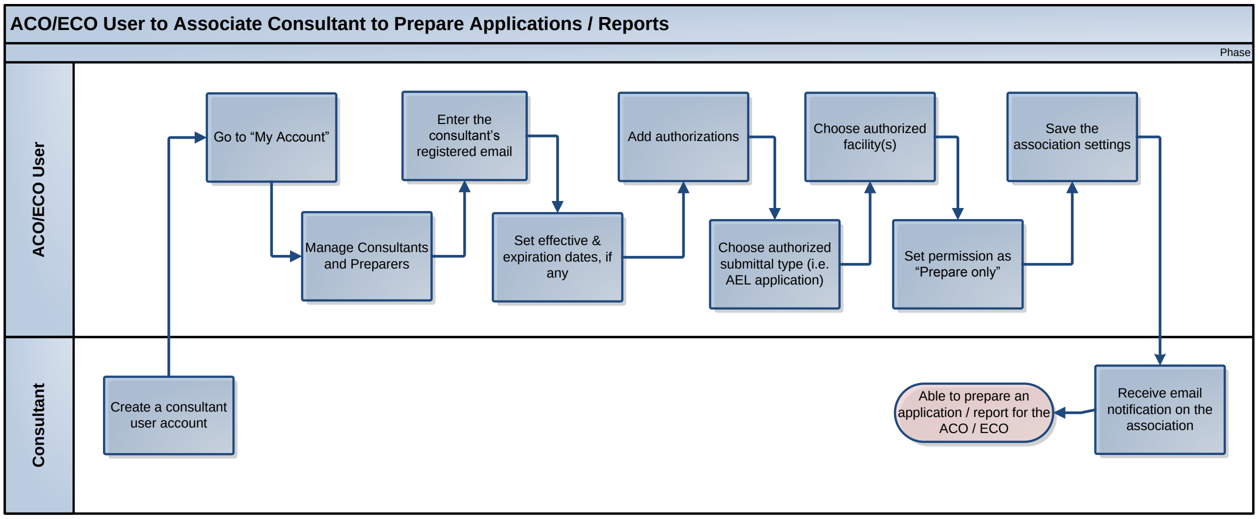
The diagram below outlines the steps necessary to create and activate an ACO / ECO account.



The diagram below outlines the steps to create a Consultant account.



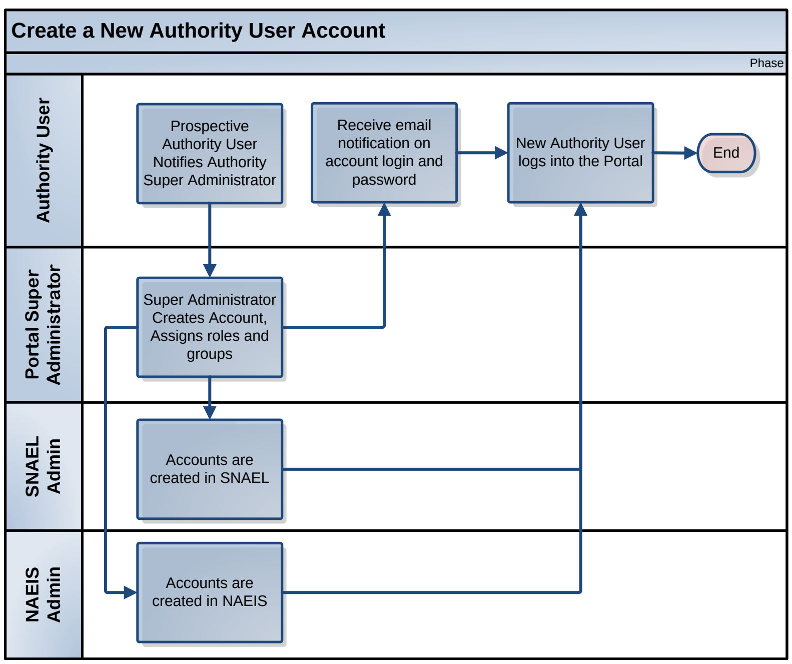
The diagram below outlines the steps on how an ACO/ECO can associate a consultant to work for him/her.



2.1.2 Licensing Authority Account Creation

Authority accounts can be added by managers and administrators of the DEA. Authority users will need their accounts set up before being able to use the access the SAAELIP authority portal. Accessibility and visibility of the user are based on the role and grouping association.

The below diagram demonstrates the steps needed to create an authority user account.



Currently SAAELIP has nine distinct roles that can be given to a user.   The below table shows the general goals for each user role. For more information on the current security groups and role association configuration continue to section 8.5.

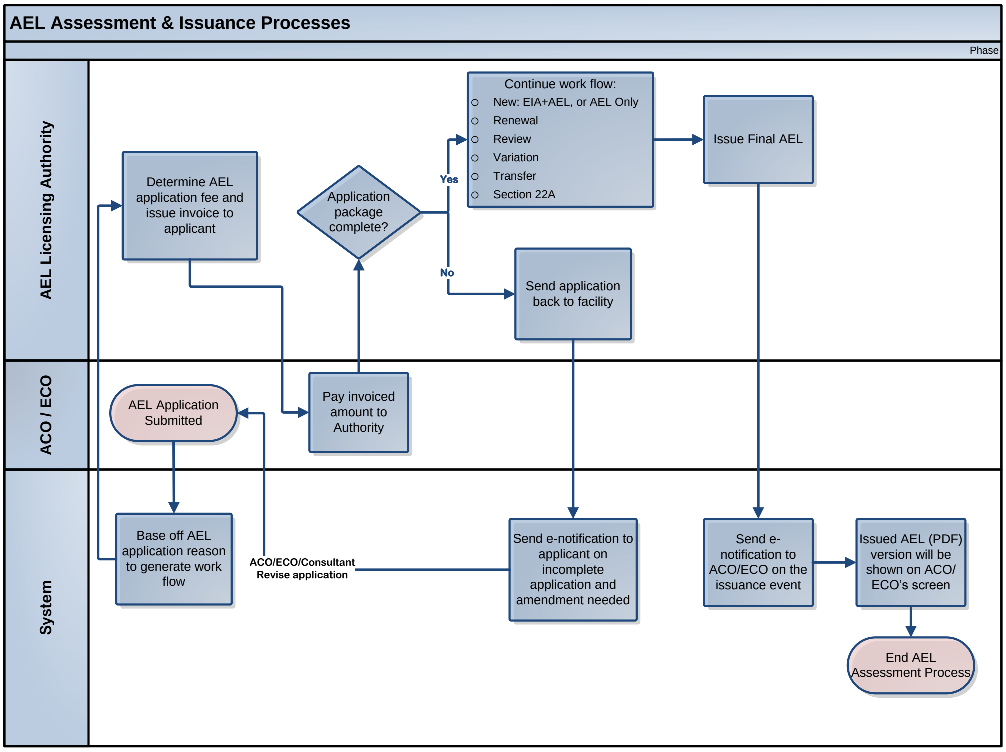
ID	Role Name	Goals, Motives, and Usage Patterns
Authority Actors		
1	Portal Super	▪ Create user accounts in the Portal

ID	Role Name	Goals, Motives, and Usage Patterns
	Administrator	▪ Manage user access to SNAEL or NAEIS system(s)
2	SNAEL / NAEIS Super Administrator	▪ Manage security and permission setup ▪ Create and maintain system reference data, and templates ▪ Manage system configurations
3	National AQO	▪ Create National Authority users (Clerks, Inspector, Engineer) ▪ Create Provincial and District/Metro Authority users (AQO, Clerks, Inspector, Engineer) ▪ Review AEL applications that are subject to National jurisdiction ▪ Sign and issue AEL final license ▪ Track performance metrics of processing AEL applications at the National level
4	National Role 1	▪ Determine fee amount and issue invoices to AEL applications that are subject to National jurisdiction ▪ Issue acknowledgement of receiving applications ▪ Conduct completeness audit on AEL applications
5	National Role 2	▪ Perform pre-licensing inspections on AEL applications that are subject to National jurisdiction ▪ Review and comment on reports and documents required by AEL regulations ▪ Prepare draft AEL license ▪ Revise draft AEL based on comments ▪ Schedule and perform inspection on facility being complained
6	National Role 3	▪ Provide comments on draft AEL that are subject to National jurisdiction
7	Provincial AQO	▪ Create Provincial Authority users (Clerks, Inspector, Engineer) ▪ Create District/Metro Authority users (AQO, Clerks, Inspector, Engineer) ▪ Review AEL applications that are subject to its Provincial jurisdiction ▪ Sign and issue AEL final license ▪ Track performance metrics of processing AEL applications at the Provincial level
8	Provincial Role 1	▪ Determine fee amount and issue invoices to AEL applications that are subject to Provincial jurisdiction ▪ Issue acknowledgement of receiving applications ▪ Conduct completeness audit on AEL applications
9	Provincial Role 2	▪ Perform pre-licensing inspections on AEL applications that are subject to Provincial jurisdiction ▪ Review and comment on reports and documents required by AEL regulations ▪ Prepare draft AEL license ▪ Revise draft AEL based on comments ▪ Schedule and perform inspection on facility being complained

ID	Role Name	Goals, Motives, and Usage Patterns
10	Provincial Role 3	▪ Provide comments on draft AEL that are subject to Provincial jurisdiction
11	District/Metro AQO	▪ Create District/Metro Authority users (Clerks, Inspector, Engineer) ▪ Review AEL applications that are subject to its jurisdiction ▪ Sign and issue AEL final license ▪ Track performance metrics of processing AEL applications at the Provincial level
12	District/Metro Role 1	▪ Determine fee amount and issue invoices to AEL applications that are subject to its jurisdiction ▪ Issue acknowledgement of receiving applications ▪ Conduct completeness audit on AEL applications
13	District/Metro Role 2	▪ Perform pre-licensing inspections on AEL applications that are subject to its jurisdiction ▪ Review and comment on reports and documents required by AEL regulations ▪ Prepare draft AEL license ▪ Revise draft AEL based on comments ▪ Schedule and perform inspection on facility being complained
14	District/Metro Role 3	▪ Provide comments on draft AEL that are subject to its jurisdiction
Facility Actors		
15	ACO	▪ Associate Consultant(s) to prepare AEL application for relevant facilities ▪ Check and review completeness of AEL application ▪ Certify and submit AEL application ▪ Request to revise or withdraw submitted AEL application ▪ Track review statuses of submitted AEL applications ▪ Renew, amend, transfer or terminate AEL license for relevant facilities
16	ECO	▪ Same as above
17	Consultant	▪ Prepare AEL application for relevant facilities ▪ Initiate AEL revision, renewal, transfer and variation processes ▪ Check and review completeness of AEL application
Public Actors		
18	General Public	▪ No system account needed ▪ Search for AEL application submitted in SNAEL system ▪ Search for AEL licenses issued in SNAEL system

2.2 *AEL Assessment and Issuance*

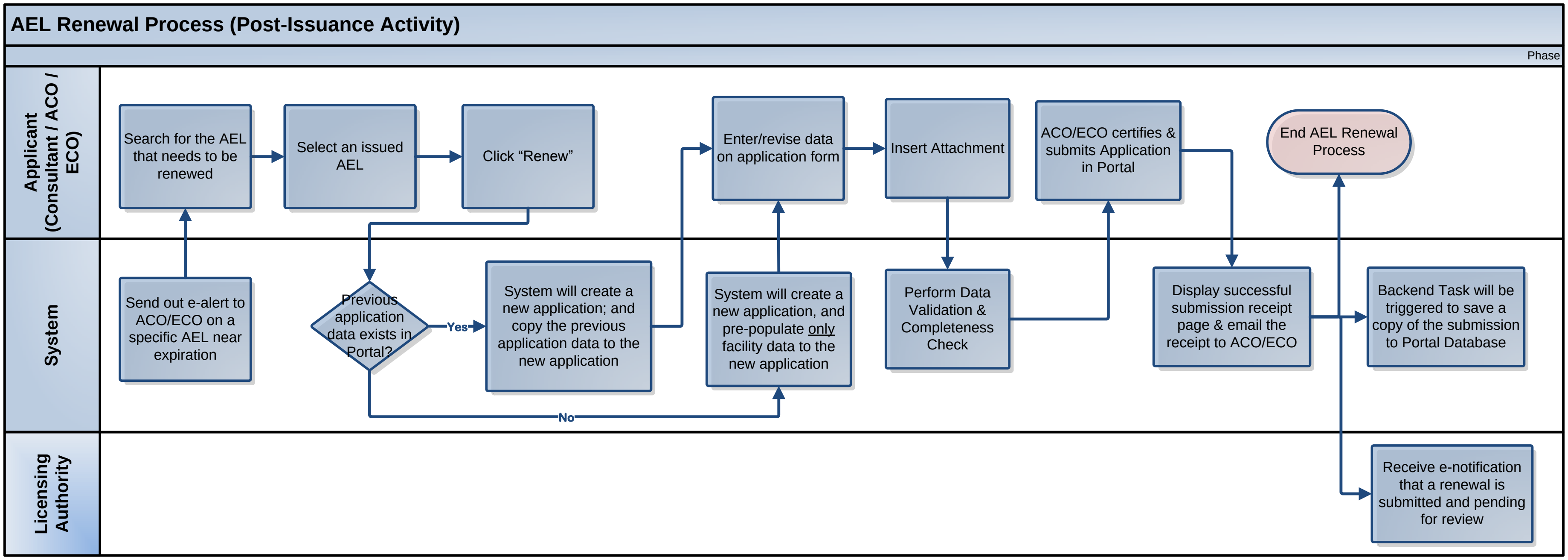
To effectively process a submission, SAAELIP has broken down each submittal type to their own distinct workflows. The list of different work flows and submittal types can be found in section 8. Please note that licenses are issued during the workflow steps and final licenses cannot be issued without completing the work flow.


AEL Assessment & Issuance Processes
Phase
AEL Licensing Authority
ACO / ECO
System
AEL Application Submitted
Base off AEL application reason to generate work flow
Determine AEL application fee and issue invoice to applicant
Pay invoiced amount to Authority
Application package complete?
Yes
No
Continue work flow:
New: EIA+AEL, or AEL Only
Renewal
Review
Variation
Transfer
Section 22A
Issue Final AEL
Send application back to facility
Send e-notification to applicant on incomplete application and amendment needed
ACO/ECO/Consultant Revise application
Send e-notification to ACO/ECO on the issuance event
Issued AEL (PDF) version will be shown on ACO/ ECO's screen
End AEL Assessment Process

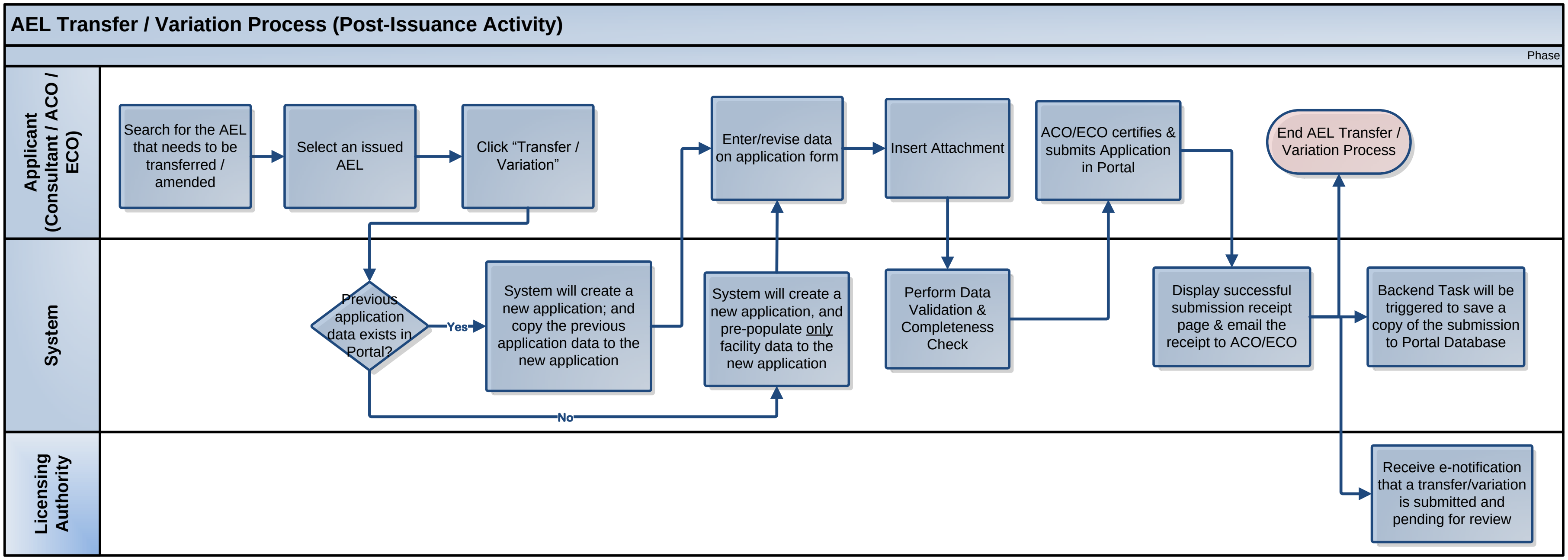
2.3 *AEL Post-Issuance Management*

After an AEL is issued, SAAELIP allows both Facility users and Authority user to renew, transfer, amend, or terminate a license; as well as allow only Authority users to review an issued AEL. The diagrams below outline the high level processes of managing an AEL after it is issued.

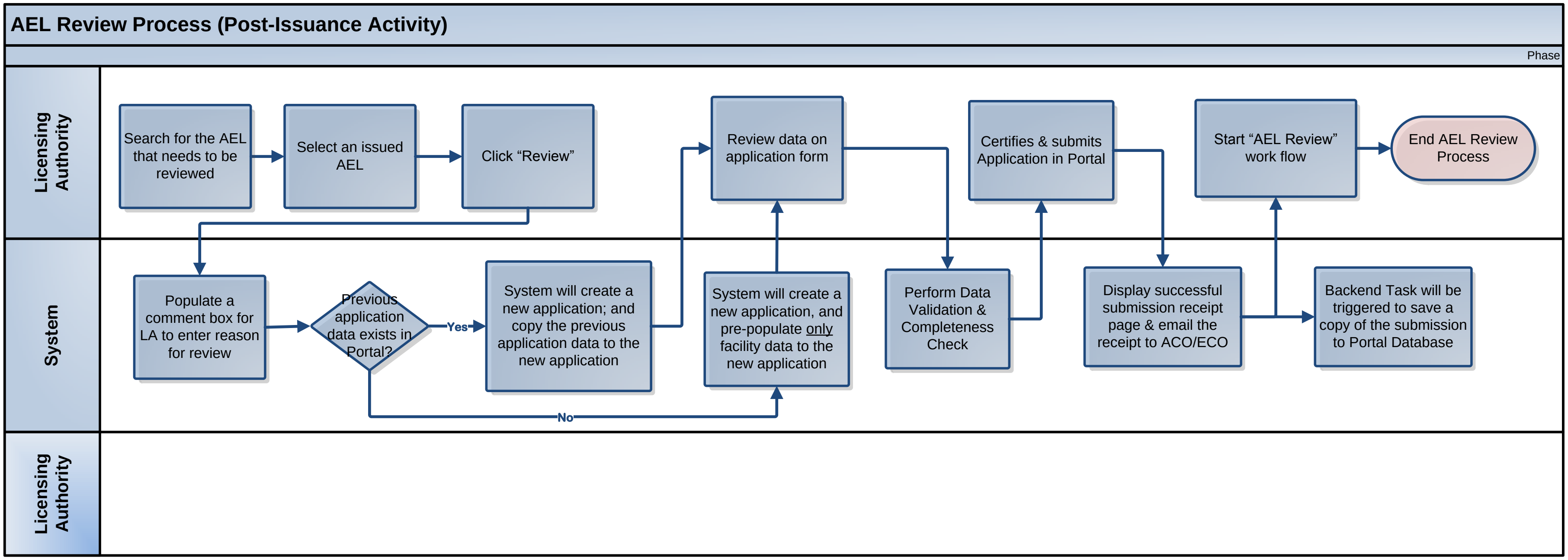
2.3.1 AEL Renewal Process



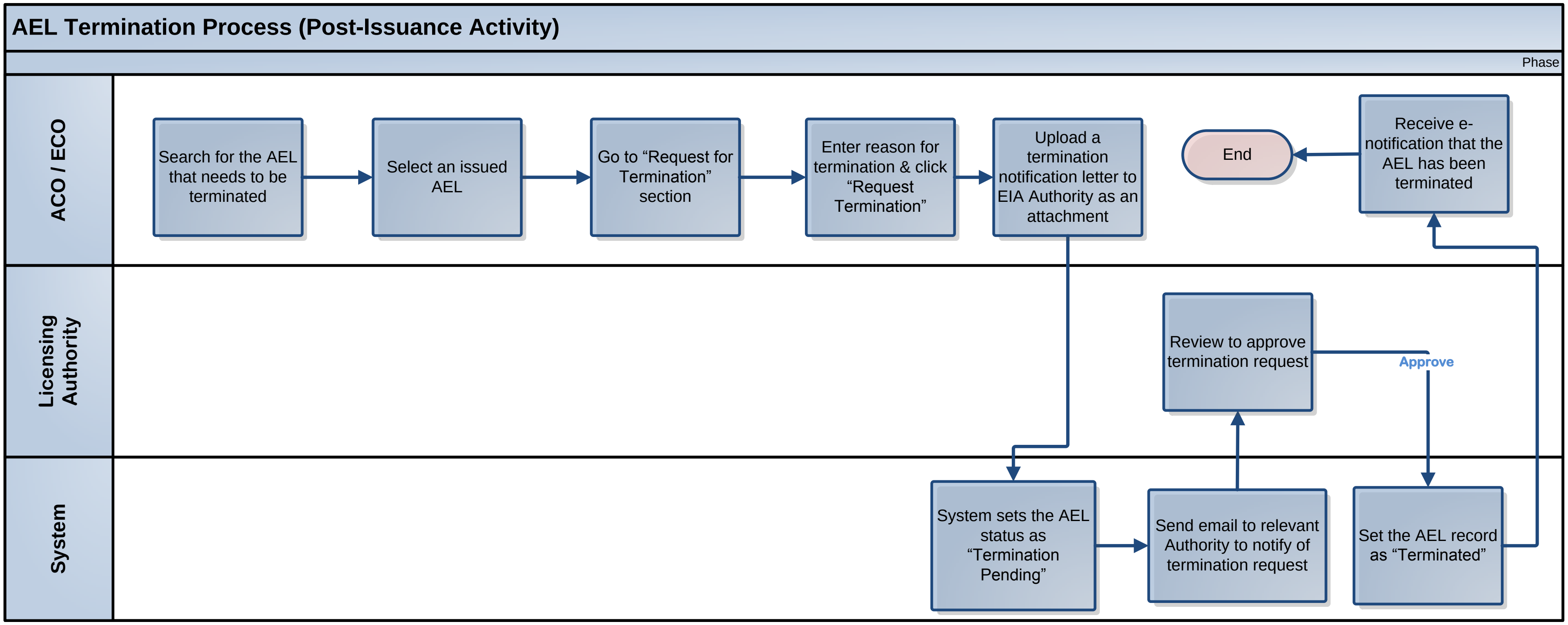
2.3.2 AEL Transfer / Variation Process



2.3.3 AEL Review Process (Initiated Only by Licensing Authority)



2.3.4 AEL Termination Process



2.4 *Performance Metrics Management*

Being able to analyze the data within SAAELIP is one of the key features provided by the system. The system allows the user to review all the data that is stored in SAAELIP thus providing a powerful tool in managing the submission and compliance process.

SAAELIP provides several management tools to track performance metrics for DEA management, which include:

- Dashboard Summary: to track branch wide submittal review status, as well as work task status of each staff (Please refer to Section 0)
- Summary Reports: which include Acknowledgement Letters, Submittals Processed Report, Intermediate Milestones Report, Pending Submittals Report, AEL Report, and AEL facility Inquiry Reports (Please refer to Section 6)
- Work Tasks Management Tool: using Calendar View and Grid View to intuitively track the progress of each work task. (Please refer to Section 7)
- Queries: allow the user to create a customized search and database analysis (Please refer to section 3.4)

These tools will be described in the later sections of this guide.

2.5 *Annual Emission Inventory Reporting Cycle in NAEIS*

2.5.1 The BIG Picture

The NAEIS is an all-in-one data reporting and management system that aims to achieve the following goals by providing a user-friendly platform for:

- Authority to add, remove, and manage facilities
- Reporters to report necessary EI Reports
- Quality Assurance Staff to check and verify prepared EI Reports
- Authority to audit submitted EI Reports
- Authority to view reports that break down emission information by different categories

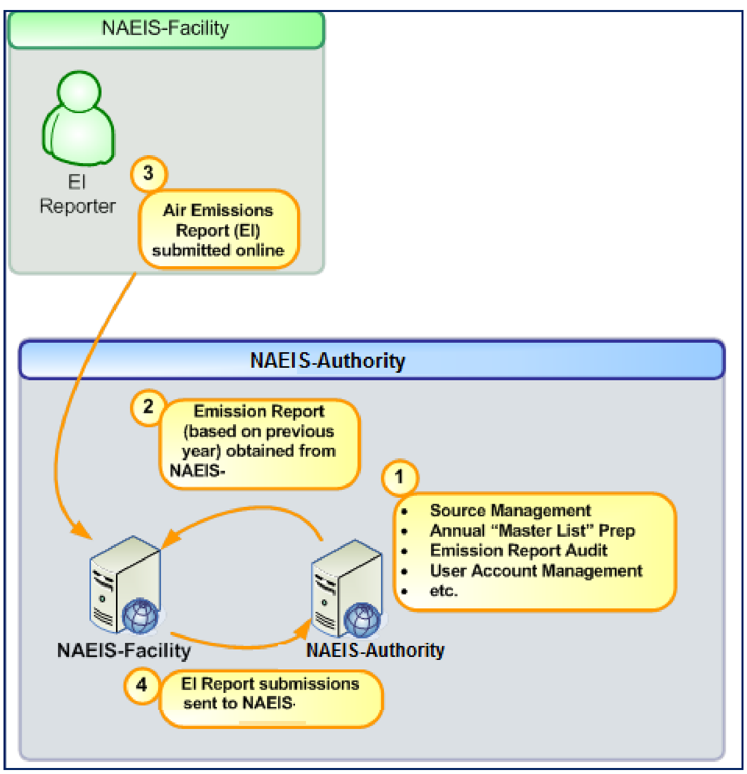


Figure 3.1 NAEIS High Level Overview

- The NAEI System has the capability to track emissions for Industrial as well as Non-Industrial Sources. Examples of Industrial Sources are factories, plants, drill sites, etc. Examples of Non-Industrial Sources are Residential Areas, Sea Ports, Vehicle Emission, etc.
- The NAEI System will include Stack, Emission Unit, Reporting Group, Activity, and Individual Pollutant Reporting.
- The reported data can assist the National Air Quality Department with further emission analysis. The NAEI System includes some analysis features such as the GHG Data Analysis Report and the Emission Search by GIS.

2.5.2 Emission Inventory Data Model

The diagram below shows the emission inventory data model. This outlines the hierarchical relationship of facilities, their emission units and stacks, and processes and emissions.

Modules:

- Facility
- Emission Unit and/or Reporting Group
- Stack
- Process (Activity)
- Emissions

Relationship:

- Reporting Year
- Data Hierarchy

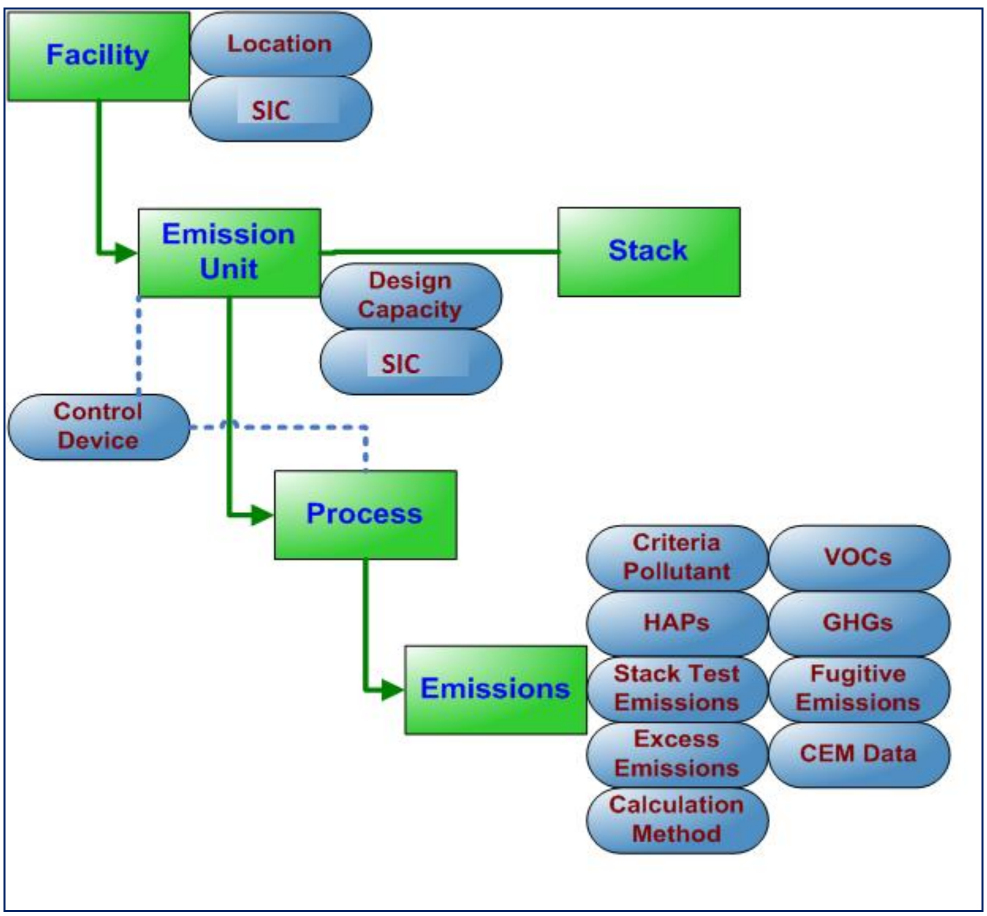
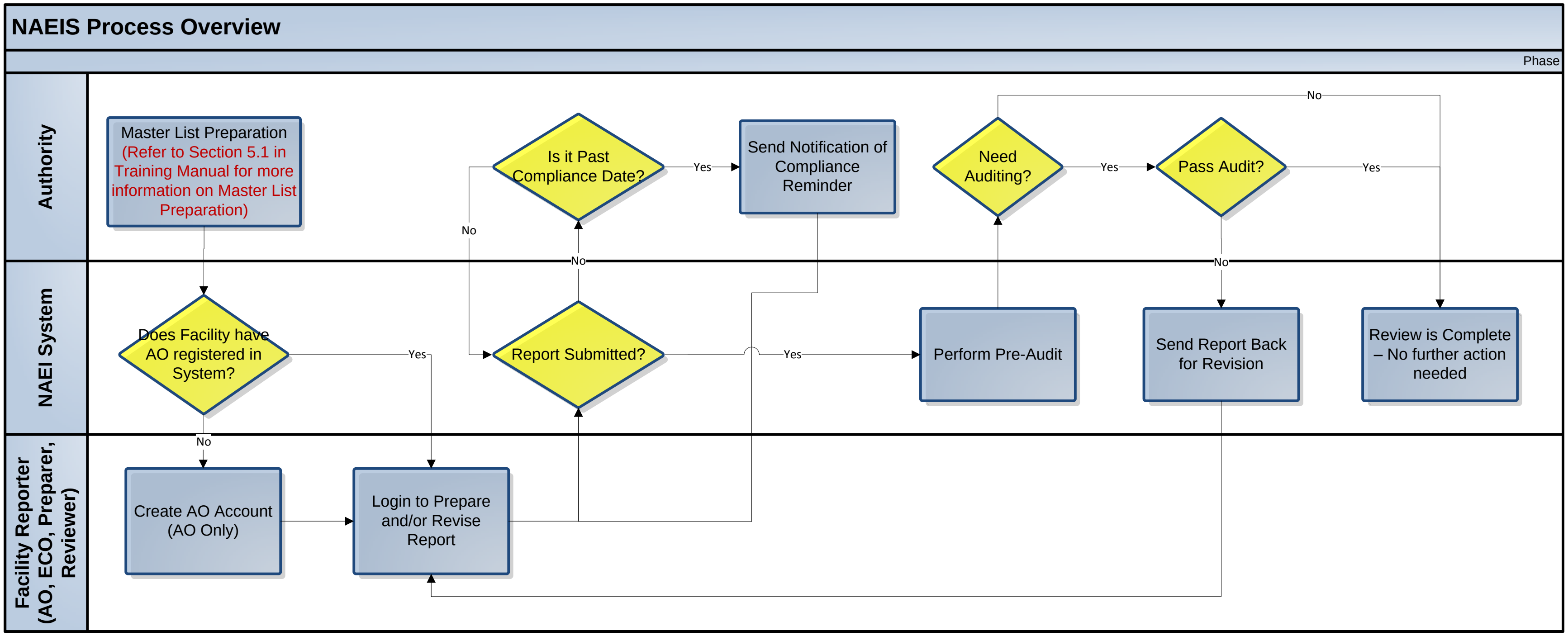


Figure 3.2 Emission Inventory Model

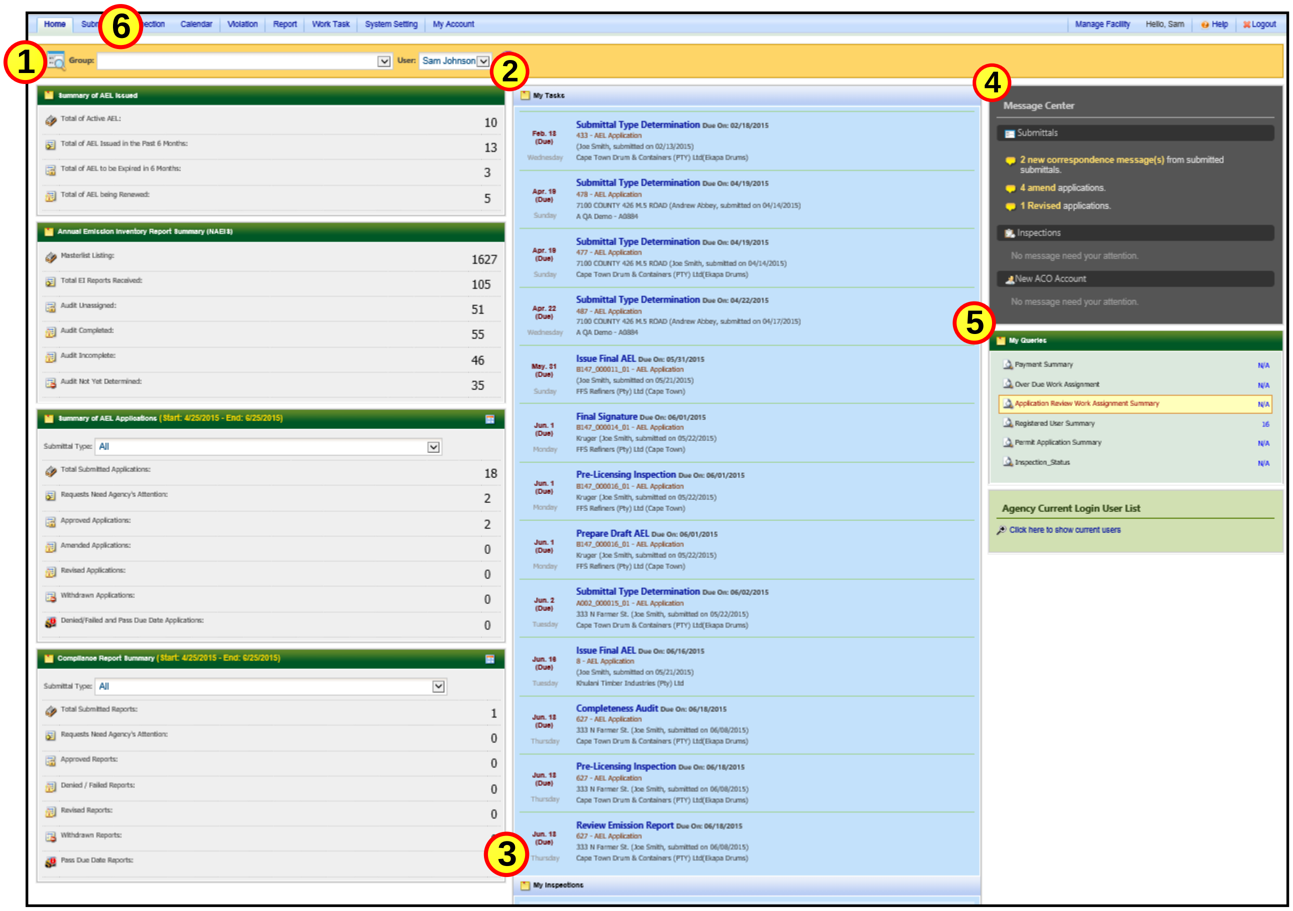
2.5.3 NAEIS Process Overview



3 Web Part

The home page of SAAELIP is also called the 'Dashboard', which gives the user visibility of key features that SAAELIP has to offer. The dashboard contains the following customized elements which display to the user a general overview of current activities associated to them:

- Summary of AEL Issued
- Annual Emission Inventory Report Summary
- Summary of AEL Applications
- Compliance Report Summary
- My Tasks
- My Inspections
- Message Center
- My Queries



SAAELIP Data Summary on the Dashboard

3.1 *Submittal Summaries*

1 The submittal, license, and reporting summary of the dashboard display provides several breakdown analyses of the system activities. This allows the user to quickly understand their current submission status and to prioritize. In the 'Submittal Summary' the user can view the number of submissions that have been submitted alongside those that need attention, approved, amended, revised, withdrawn, or denied/failed in the SAAELIP system. The user can view the items that have been categorized by clicking on the number of submittals in that

category. This will bring the user to the 'Submittal Review' section of SAAELIP, displaying only those submissions that belonged to the specified category. The same applies for the other summary sections on the left side of the user's dashboard.

3.2 *My Tasks*

2 The 'My Task' feature is a useful feature that has been implemented so that the user can see what tasks have been assigned to them. The list is ordered by the 'Due Date' descending so that the activities that have been overdue the longest take priority in the view.

3.3 *My Inspections*

3 The "My Inspection" feature allows the user to see which inspection tasks have been assigned to them. They can choose which inspection items they see by using the option using the options in the drop down menu.

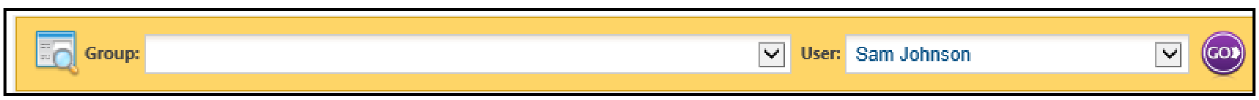
3.4 *Message Center*

4 The 'Message Center' notifies the user of any sort of communication that requires attention. By clicking on the notification, it will bring the user to the section where the message is displayed.

3.5 *My Queries*

5 'My Queries' is versatile in its approach to provide information to the user. The details of these queries are configured under 'Report -> Query -> My Queries'. This allows the user to customize their results with precision. Unless the user is extremely familiar with the database structure, modification of these queries is not advised.

6 SAAELIP provides additional visibility tools for users in multiple groups and/or who manages other users. The filter tool above 'My Task' allows the user to view tasks for their associated groups or by individuals.

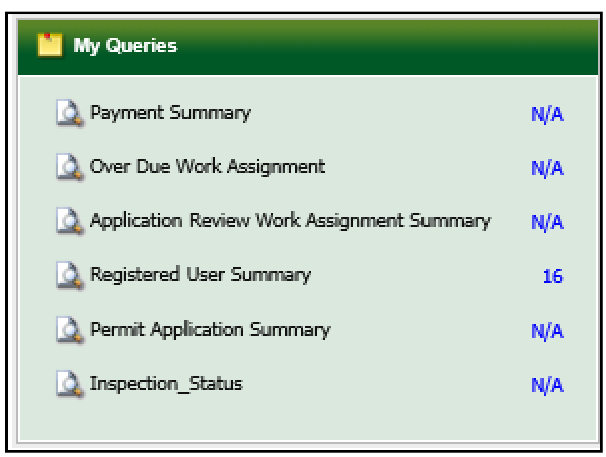


Filter Tool on the Dashboard

3.5.1 System Default Queries

Although SAAELIP already provides several tools to analyze data, the user might want a more specific breakdown.

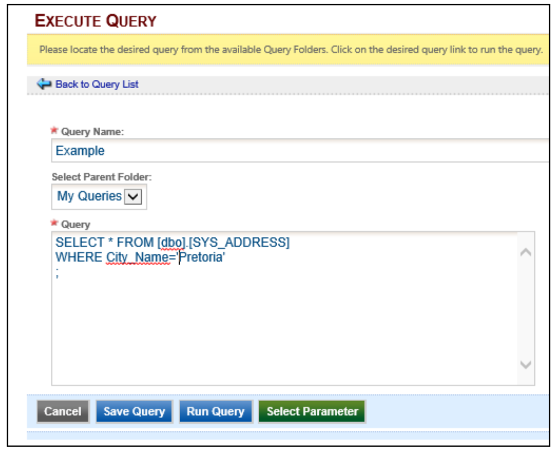
Currently SAAELIP has the following queries that have been pre-configured.



- 'Over Due Work Assignment' contains input parameters so that the user can filter overdue tasks by system user.
- 'Registered User Summary' displays all current facility users registered in SAAELIP.
- 'Inspection Status' contains multiple parameters that the user can use to search inspections in several ways.
- 'Application Review Work Assignment Summary' displays the work assignments based on the system user selected.
- 'License Application Summary' contains input parameters so that the user can filter submittals by type, review status, and date range.

3.5.2 Self-Created Queries

The self-created query requires an in-depth knowledge of the current database structure in order for this tool to be useful. For example, if the current search filters did not contain a filter option, then a query could be created to compensate. In the example below, the query will return all the addresses in the database filtered by the city name ‘Pretoria’.

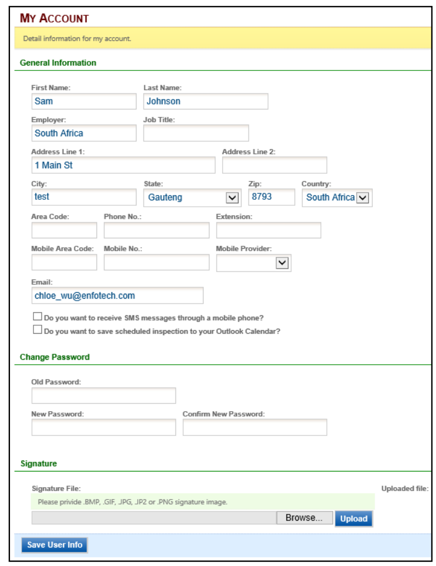


4 Account and Security Management

This section contains details on not only how to manage the personal account but also details on managing other system users and facility accounts.

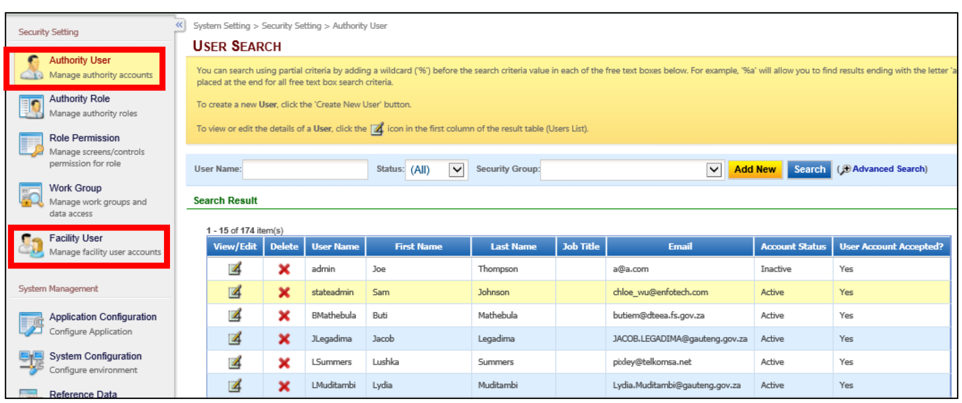
4.1 *Manage “My Account”*

In ‘My Account’ the user can modify their personal information. Situations where a user might need to change their information could be if the user changed their e-mail or telephone number. Having a valid current e-mail address is extremely important for using SAAELIP in situations where the user password needs to be reset, the user wants to receive e-mail notifications when they are assigned a new task, etc. Additionally in this section, the user can change their password. If the user desires, the user can upload a digital signature that can be used when sending out e-mails generated by the system.



4.2 *Manage System Users*

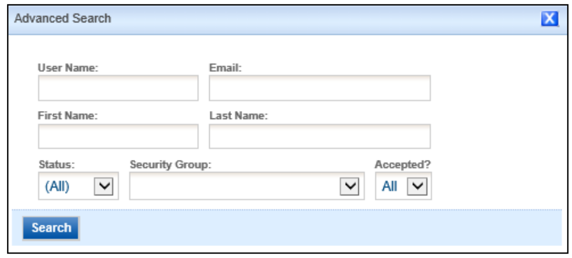
From time to time, authority users will need to manage the account settings of both authority and facility users. This module is only open for managers. Cases where a user will need to access this section would be adding a new user or deleting a user from their group. To manage system users, navigate to ‘System Settings -> Authority Users’. This feature will



only be available to
those with certain access
levels.

In the above Search Screen, the administrator can search for a system user based on the search filter criteria. The search can be conducted by using the following fields, which are displayed upon clicking the 'Advanced Search' link:

- **User Name:** Indicate the system user account name
- **First Name:** User given name
- **Last Name:** User family name
- **E Mail:** Email address
- **Account Status:** Choose a status for your account: Active or Inactive
- **Security Group:** Group in which user is associated with
- **User Account Accepted:** All, Yes or No

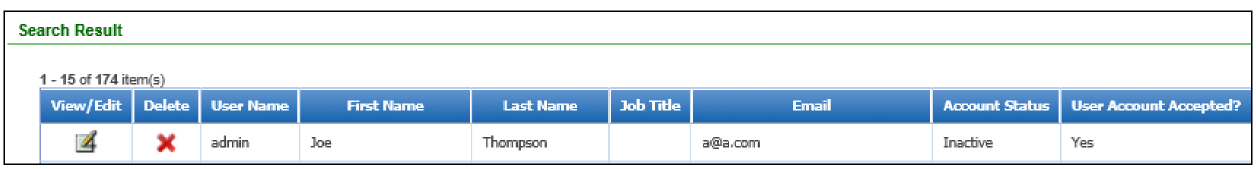


A User can also sort the search results by simply clicking the corresponding label. (For example, click First Name label to sort the results in ascending/descending order). Managers and administrators have access to the following functions to properly manage authority users:

- View and edit current authority user information
- Creating new authority user accounts
- Delete authority user accounts
- Associate/de-associate groups and roles

4.2.1 Viewing User Information

SAAELIP user grid view provides a general overview of the users but usually not in enough detail and contains little ability to edit the user information. In order to edit the user information and view more detail, the user can simply click the View / Edit ( ) button. In the User Information screen, the administrator can navigate through the different sections for making updates, if required.

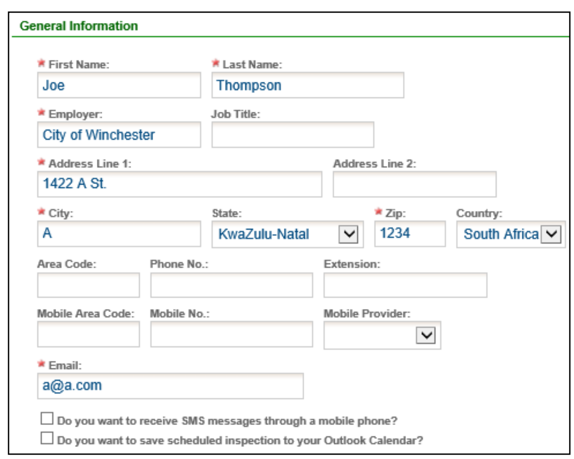

Search Result

1 - 15 of 174 item(s)

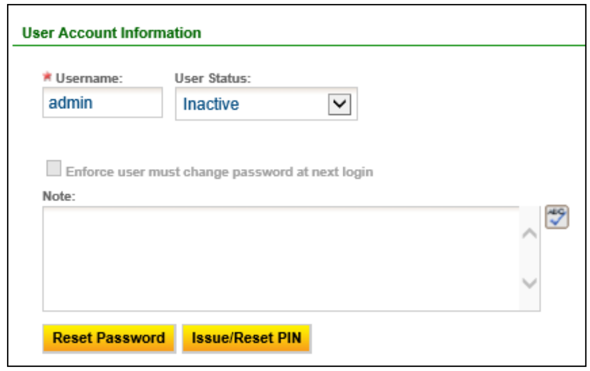
View/Edit	Delete	User Name	First Name	Last Name	Job Title	Email	Account Status	User Account Accepted?
		admin	Joe	Thompson		a@a.com	Inactive	Yes

4.2.1.1 General Information

Managers and administrators will need to use this tool in order to maintain proper user information. In the General Information screen to the right, the administrator can update or change an user's information through the following fields; First Name, Last Name, Employer, Job Title, Address Line 1, Address Line 2, City, State, Zip, Country, Phone Number, Extension, Mobile Number, and Email.



System User Detailed Information



System User Account Activation

4.2.1.2 User Account Information

In the User Account Information screen to the right, the administrator can select the status of User Status to either active or inactive from the drop down list. By setting the user to 'Inactive', the user can no longer access the SAAELIP system. If needed, the system provides a field to input notes about the user account.

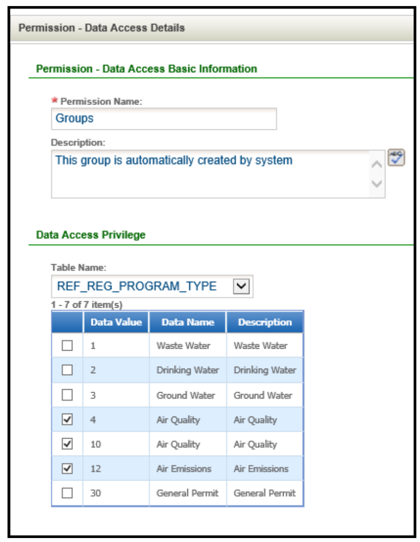
4.2.1.3 Work Groups

User Accounts and Security Management

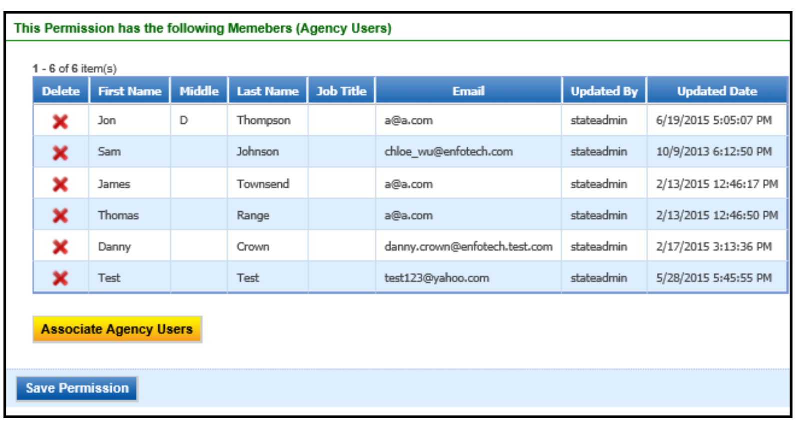
The System will support role-based security which will include three major components:

- **User/Group:** user account and the functional group(s) the user belong to. For example, a User could be assigned to a National, Province, District or Metropolitan Municipality work group.
- **Role:** a "Title" that represents a predefined job functions (see 4.2.1.4 below). For example, the User could have an ACO/ECO role, or could have an Authority Role (i.e. AQO)
- **Permission:** system function a "Role" could perform

The work group feature plays an important role in SAAELIP due to the fact that the SAAELIP system relies heavily on the grouping to assign key tasks and to provide visibility. This is allows the authority users from different branches and/or groups to only see those items pertaining to their group. In the Work Groups screen to the right, administrators can associate groups with a particular user by clicking the associate groups button. At any point of time, the administrator can delete the user from the existing Groups by simply clicking the delete (✕) button of the corresponding User.



	Data Value	Data Name	Description
☐	1	Waste Water	Waste Water
☐	2	Drinking Water	Drinking Water
☐	3	Ground Water	Ground Water
☑	4	Air Quality	Air Quality
☑	10	Air Quality	Air Quality
☑	12	Air Emissions	Air Emissions
☐	30	General Permit	General Permit



This Permission has the following Memebers (Agency Users)

1 - 6 of 6 item(s)

Delete	First Name	Middle	Last Name	Job Title	Email	Updated By	Updated Date
✕	Jon	D	Thompson		a@a.com	stateadmin	6/19/2015 5:05:07 PM
✕	Sam		Johnson		chloe_wu@enfotech.com	stateadmin	10/9/2013 6:12:50 PM
✕	James		Townsend		a@a.com	stateadmin	2/13/2015 12:46:17 PM
✕	Thomas		Range		a@a.com	stateadmin	2/13/2015 12:46:50 PM
✕	Danny		Crown		danny.crown@enfotech.test.com	stateadmin	2/17/2015 3:13:36 PM
✕	Test		Test		test123@yahoo.com	stateadmin	5/28/2015 5:45:55 PM

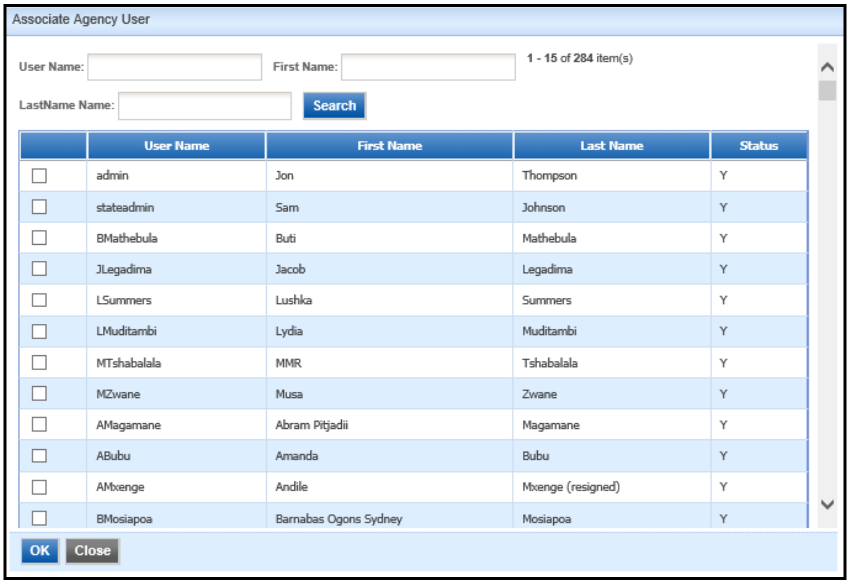
Associate Agency Users

Save Permission

4.2.1.4 Authority Roles

Authority roles determine if the authority user can see certain functions. This prevents unauthorized users from modifying data and configurations within SAAELIP. In the below Authority Roles screen, an administrator can

assign any user to a System Role by selecting the corresponding checkbox. By associating the user to the role, that user now has the role access level.

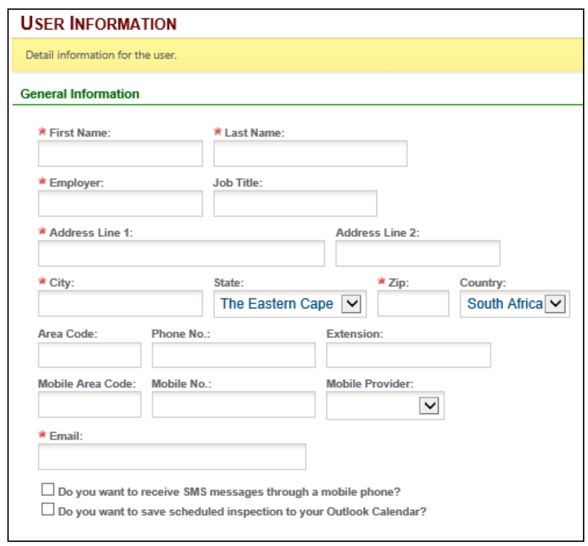


	User Name	First Name	Last Name	Status
☐	admin	Jon	Thompson	Y
☐	stateadmin	Sam	Johnson	Y
☐	BMathebula	Buti	Mathebula	Y
☐	JLegadima	Jacob	Legadima	Y
☐	LSummers	Lushka	Summers	Y
☐	LMuditambi	Lydia	Muditambi	Y
☐	MTshabalala	MMR	Tshabalala	Y
☐	MZwane	Musa	Zwane	Y
☐	AMagamane	Abram Pitjadii	Magamane	Y
☐	ABubu	Amanda	Bubu	Y
☐	AMxenge	Andile	Mxenge (resigned)	Y
☐	BMosiapoa	Barnabas Ogons Sydney	Mosiapoa	Y

Role and User Association

4.2.2 Creating New System User

Since authority users cannot create their own accounts, a manager or administrator will need to use the 'Add New' system user feature. To create a new system user, click the 'Add New' button. In the New User Information screen, enter the necessary information in the following sections and clicks the 'Save User Info' button to save the information of newly added user. In addition, the user can designate the username and associate the user to a security group. In order to have the user account acknowledged, set the user status to active.



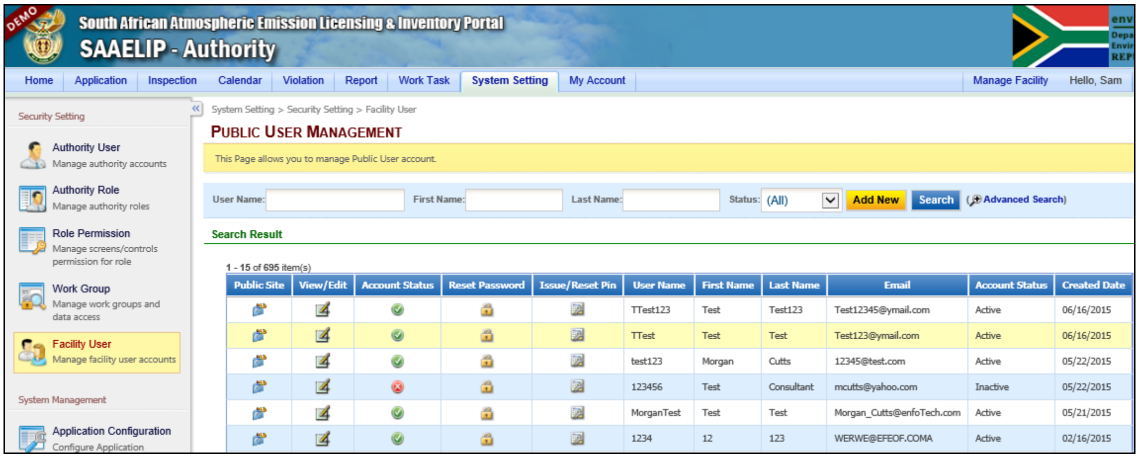
New System User Registration

4.3 *Manage Facility Users*

It is important to note that the facility users are managed by the authority. Therefore, the authority user will should be familiar with this module in order to assist the facility users. The module contains the following features:

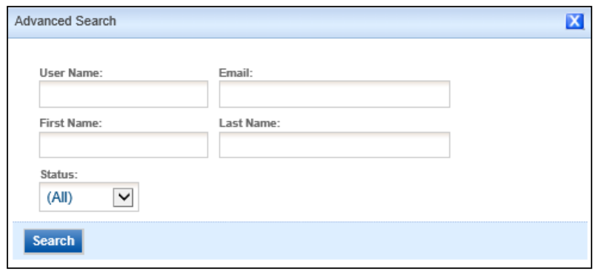
- Edit facility user information
- Reset password/pin
- Enter user account without having the users password
- Create/delete/de-activate a new facility user
- Change user group type and facility association

By clicking System Setting -> Facility Users, an admin user can open a search page with all currently existing facility users displayed in the results grid-view by default.



Facility User Account Grid View

In the above Search Screen, the administrator can search for a facility user based on the search filter criteria. The administrator can search by using the following fields, which are displayed upon clicking the "Advanced Search" link:



- **User Name:** Indicate the system user account name
- **First Name:** User given name
- **Last Name:** User family name
- **E Mail:** Email address
- **Account Status:** Choose a status for your account: Active or Inactive

The administrator can also sort the search results by clicking the corresponding label. (For example, click First Name label to sort the results in ascending/descending order).

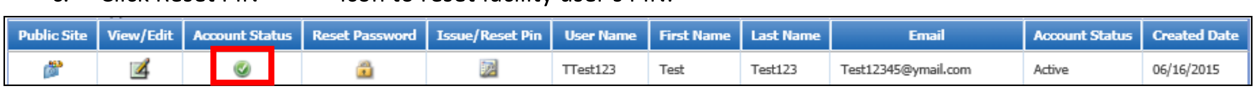
4.3.1 Viewing User Information

In the above Search Results screen, the administrator can view any User Information by clicking the View / Edit ( ) button. In the User Information screen, administrators can navigate through the different tabs to make any necessary updates. In addition, administrators can perform the following actions:

a. Click Change Status " " icon to change facility user's status.

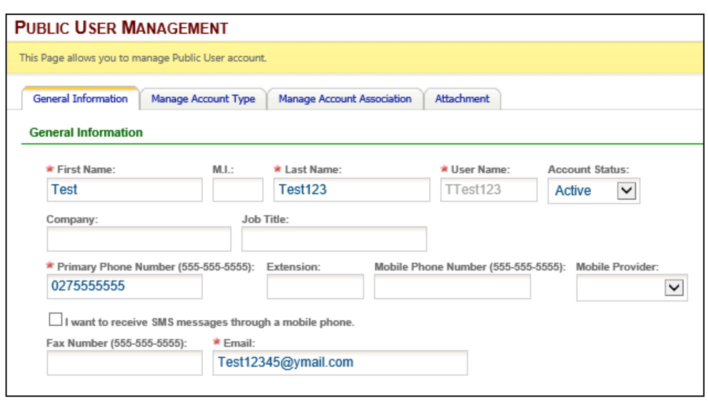
b. Click Reset Password " " icon to reset facility user's login password.

c. Click Reset PIN " " icon to reset facility user's PIN.



Public Site	View/Edit	Account Status	Reset Password	Issue/Reset Pin	User Name	First Name	Last Name	Email	Account Status	Created Date
					TTest123	Test	Test123	Test12345@ymail.com	Active	06/16/2015

4.3.1.1 General Information

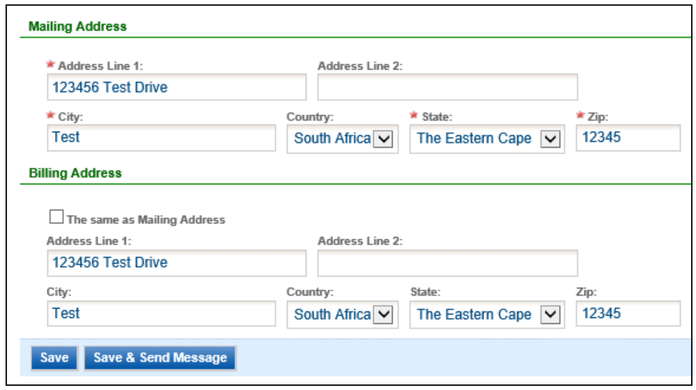


When the View / Edit ( ) button is clicked for the user, the administrator can update or change the facility user information through the following fields; First Name, Last Name, User Name, Status, Company, Job Title, Primary Phone Number, Extension, Mobile Phone Number, Fax Number, Email, Address Line 1, Address Line 2, City, Country, State, and Zip.

Facility Account Detail Menu

4.3.1.2 Address Information

In the screenshot to the right, the administrator can update or change the facility user address information through the following fields; Address Line 1, Address Line 2, City, country, State, and Zip.



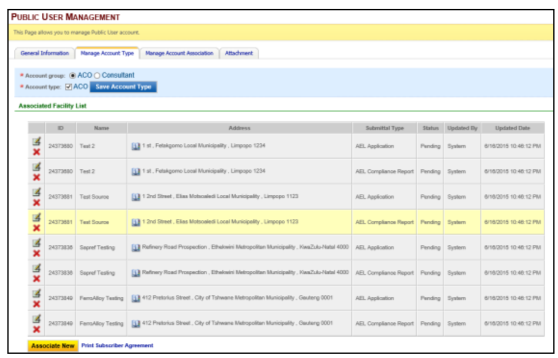
Facility Account Information

4.3.2 Change User's Account Type and Account Association

In some instances, the LA may need to turn a facility 'inactive' for a user or change a user's account type. In other instances, the authority will modify the facility user's account type since a facility user cannot once his/her account has been created. The ACO/ECO may request from the LA to allow him/her additional rights to another submittal type. This section describes in detail on how to manage facility user accounts so that facility users can function properly on the Facility Portal.

4.3.2.1 Change User's Role

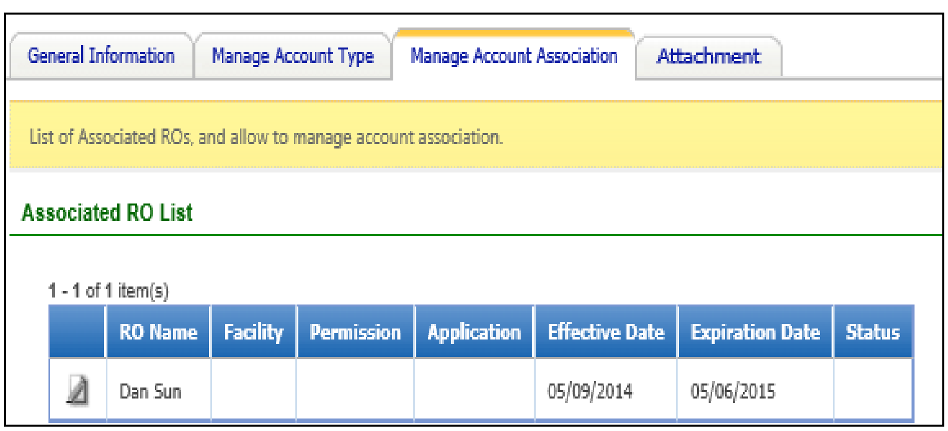
A consultant might become an ACO/ECO for a facility and may request for their account role to change in SAAELIP. To make the change, the authority will need to go to the facility user's account and access the 'Manage Account Type' sub menu. In this menu, the user has the ability to configure the account type of a facility user. The user can select whether or not the user is a 'Consultant' or an 'ACO/ECO'. If the user was selected as a 'Consultant', the 'ACO/ECO' would associate the 'Consultant' via the Facility Portal. In addition to selecting the facility user role, the type of submittal the 'ACO/ECO' can utilize can also be selected.



Facility Account and Facility Association

4.3.2.2 Inactivate / Activate Account

For security reasons, a facility user's account might need to be set to 'Inactive' so that the facility user may no longer access their account such as in cases when a facility user has left the company or position. In order to activate an account, click on the icon. This will prompt a menu for the user to either switch the account to 'Active', 'Inactive', or 'Pending'. If the status is set to 'Active', the facility user will be able to then create and submit submittals that were selected for that particular facility. If the status is set to 'Inactive' or 'Pending', the facility user can still see the status but will not

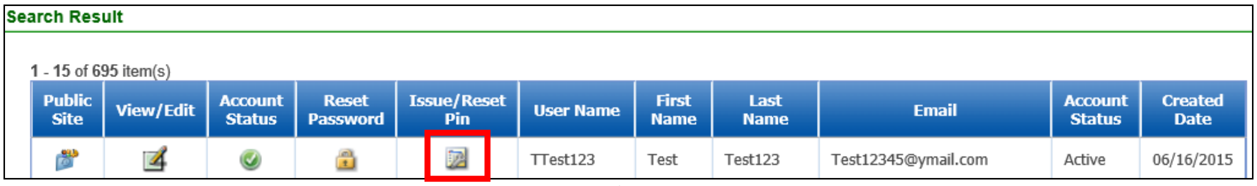


have any rights to that facility.

Besides being able to manage the associated facility, the authority can also see which 'ACO/ECO' a 'Consultant' is associated with. The 'Manage Account Association' tab within 'Manage Public User' allows the user to view. SAAELIP is currently configured so that a 'ACO/ECO' can be a 'Consultant' for another 'ACO/ECO'.

4.3.2.3 Issue / Reset PIN

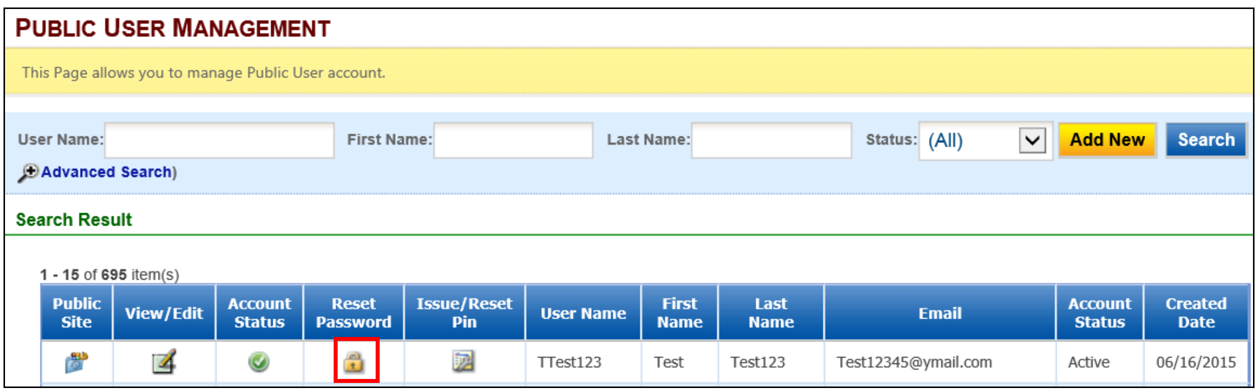
For ACO/ECO, once their account is set up, they will need a PIN issued in order to submit AEL applications or reports. In this module, the user would click on the image below to 'Issue' a PIN to the facility user selected. The PIN will be sent in the form of an e-mail to the selected facility user. This feature helps reset a pin if the facility user forgot their pin or set it incorrectly.



Issue Pin Button

4.3.2.4 Reset Password

In certain cases a user might need their password reset. Through this module, the user can reset a facility user's password by clicking on the 'lock' button displayed in the image below.



Reset Password Button

4.3.3 Creating New Facility User

An administrator also has the ability to add a new user by simply clicking the 'Add New' button. This feature is often times used if the authority is setting a facility user in order to submit a paper submission. In the New User Information screen, a user can enter the necessary information in the following sections and click the 'Save' button to save the information of newly added user. After saving the user info, a message on the top of the screen will display "Save Successfully" to notify that the user account has been created.
The newly created user will then receive an e-mail with a new password. They will have to log into the Facility Account using this information to reset his/her password, pin, and security questions.

5 Facility Management

If an Authority wants to modify the information of an existing source or create a new source, the “Manage Source” function may be used.

5.1 View/Edit an Existing Facility

The "Manage Source" function allows the users to maintain source/facility data in the system, regardless of whether or not the source/facility is included in the current reporting year.

To access the "Manage Source" function, click **Manage Source** on the left panel. By default, the page will be loaded with all the sources in your district (Figure 8.1).

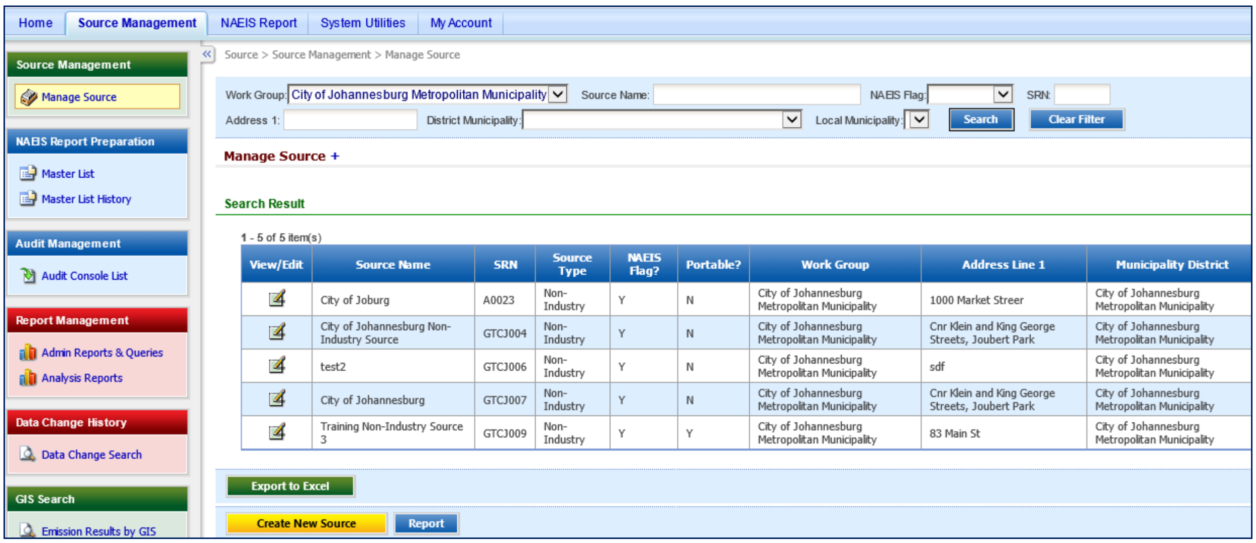


Figure 6.1 Web Page of Managing Source

5.1.1 Search for a Facility

In the search panel (Figure 6.1), specify the desired search criteria and click on the **Search** button to find the desired sources. The search criteria include:

- Work Group (District)
- Source Name
- NAEIS Flag
- SRN
- Address
- District Municipality
- Local Municipality

To reset the user-entered search criteria, click on the **Clear Filter** button to remove the previously entered values in the search panel. Note that if you leave the search criteria blank, it will search for all sources within your jurisdiction.

5.1.2 View/Edit a Facility

To view or edit an existing source, click the View/Edit button before the source name. The basic information of the source will display in the page (Figure 6.2).

Figure 6.2 View/Edit an Existing Source

For the detailed instructions on "Source Information" and "Emissions Inventory Contact" tabs, please refer to Sections 8.1 and 8.2.

In the "Comments" tab, you can choose a Comment Type from the drop-down list to search a specific comment on the source. The comment types include:

- Source (General comments)
- Audit

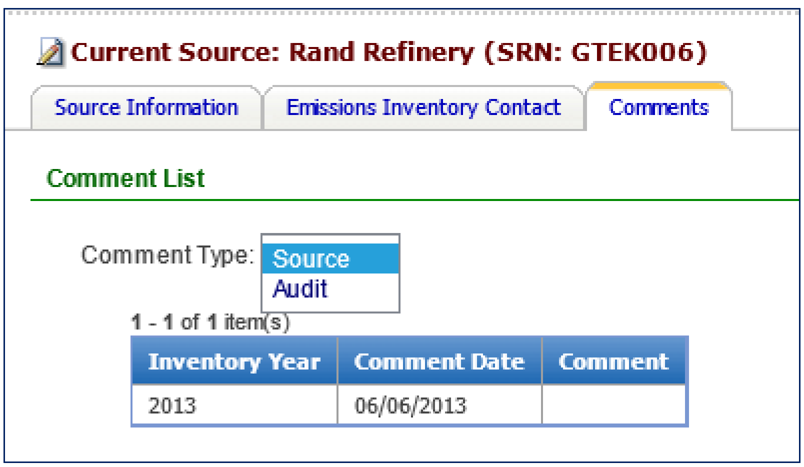


Figure 6.3 View Comments on a Source

5.2 Add a New Facility

To add a new source for NAEIS reporting, click on the **Create New Source** button (Figure 6.1) to access the new source data entry form.

In the new source data entry form (Figure 6.4), enter the information in the Source Identification, Relevant Authority Only, and Primary Contact Information Sections.

5.2.1 Source Identification Section

Refer to instructions for Source Form (Section 8.1) to complete the "Source Identification" section. Make sure to choose whether this source is an Industry or Non-Industry Source. An example screenshot of the "Source Identification" section is shown below.

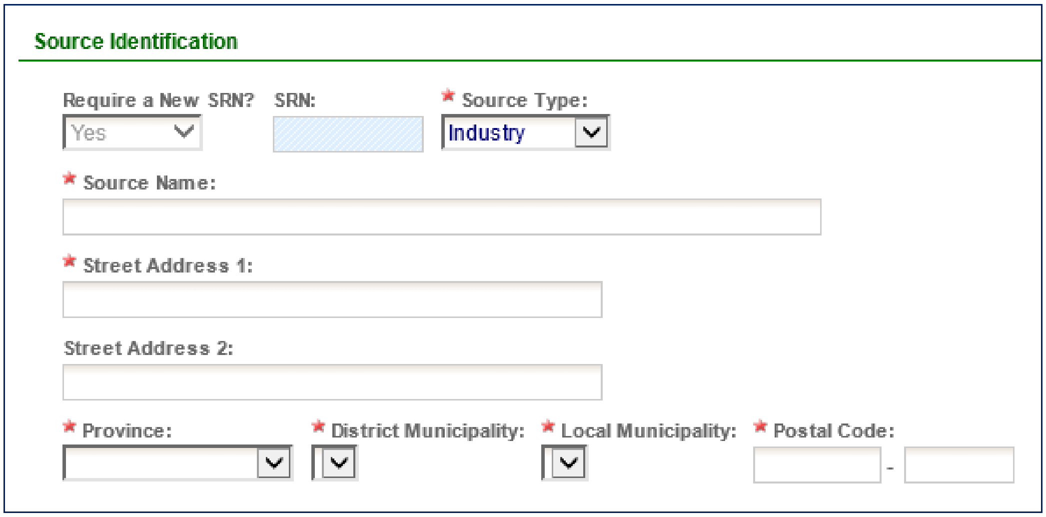


Figure 6.4 Data Entry Form of a New Source

5.2.2 Relevant Authority Only Section

NAEIS Source Flag: Select “Yes” if this source needs to be reported this year; select “No” if this source is not required to be reported this year; if you are unsure, select “Undecided”.

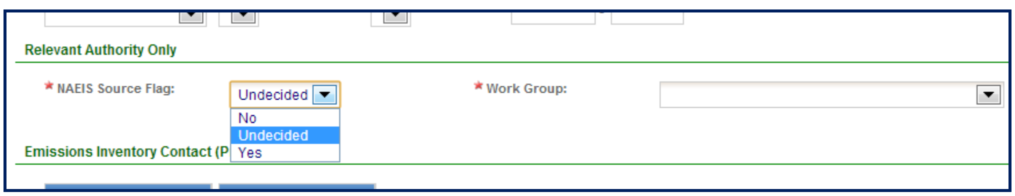


Figure 6.5 Relevant Authority Only Section

Work Group: Select the district to which the new source belongs.

5.2.3 Primary EI Contact Section

Refer to instructions for Contact Form (Section 8.2) to complete the sections of "Primary EI Contact Information".

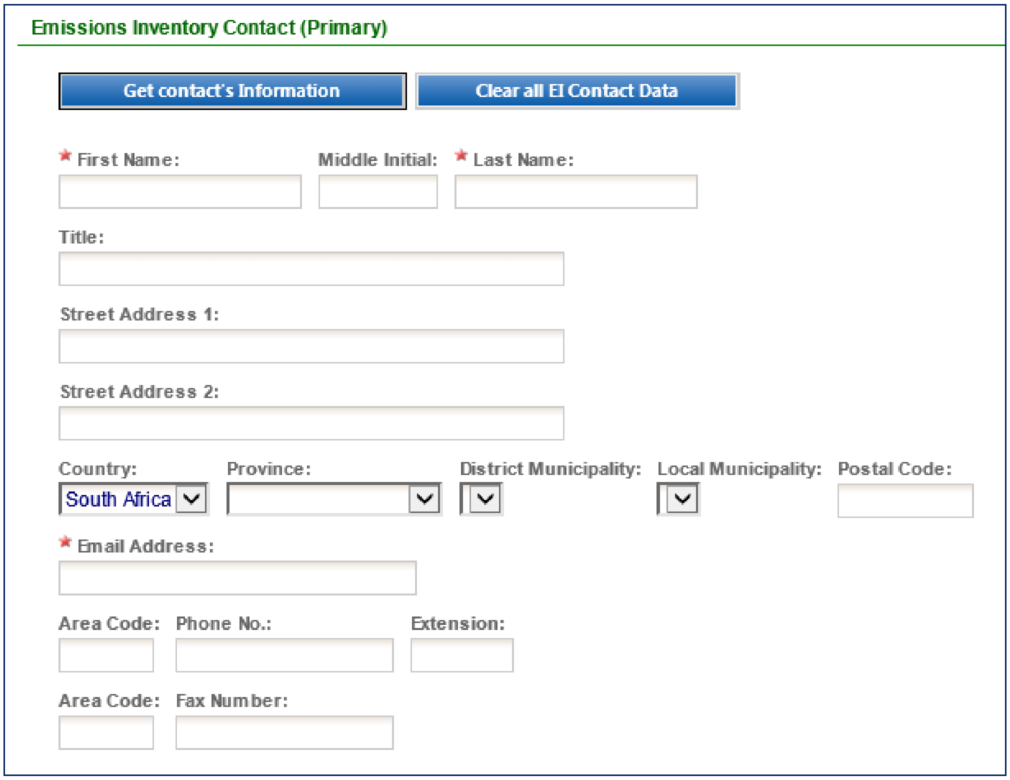


Figure 6.6 Data Entry Form of a New Source

All fields marked with asterisks (*) are required fields.

Note that if the Accounting Officer already has a NAEIS account, you may click the **"Get Contact's Information"** button to search for the AO. Upon clicking, the system will allow you to search for Accounting Officers within the system based on First Name, Last Name, E-mail Address, and Company Name. Click the **"Search"** button, which will yield a list of results based on your search criteria. Then, select the AO's name and click the **"Select"** button to pre-populate the AO information onto the form. This will also automatically associate the AO with the source in which you are creating. Click the **Clear all EI Contact Data** to clear all the fields in the Emisions Inventory Contact Section.

Once the data entry form is completed, click on the **Save Source** button to save the form and create the new source. When the message "Saved Successfully" appears at the top, the system-generated SRN number for the new source will be displayed in the "SRN" field.

6 AEL Assessment and Issuance

SAAELIP provides the Licensing Authority with several features to manage both submissions and licenses. Having these tools available gives the LA flexibility to modify/review submissions and licenses. The features can be summarized by the following four parts:

- Submission review tools
- License/certification management
- SAAELIP communication tool with facility users
- Submitting paper submissions

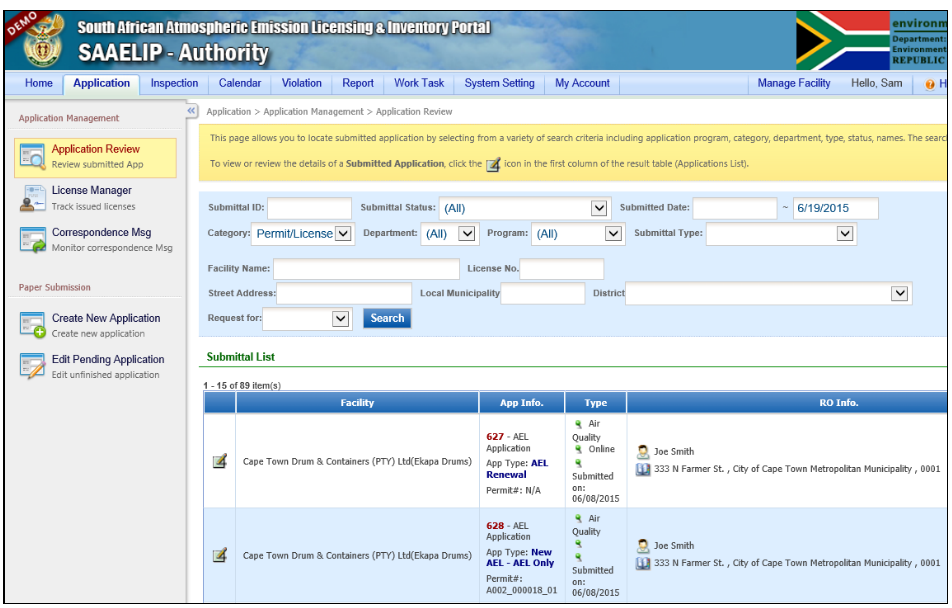
6.1 *Overview of Submission Review Features*

The submission review features provide the authority several tools to assist in the submittal review process. These application features allow the user to see the work activity done per submittal. The user can also view the submittal and its issuance. This section can be broken down into several parts:

- Submittal List
- Summary of Review Status
- Submission Info
- Work Activities
- Final Decision
- Issuance
- Correspondence
- Email History

6.1.1 Submittal List

When a facility user sends a submittal, the submittal will appear in the ‘Submittal Review’ module of the ‘Submittal’ section. From this module, the user is given multiple search functions ranging from ‘Submittal ID’ to ‘Facility Name’. By clicking on ‘Facility’, the submittal will sort by ascending or descending order. By clicking on ‘App. Info’, the submittal will sort by submittal ID in ascending or descending order.



Submittal List

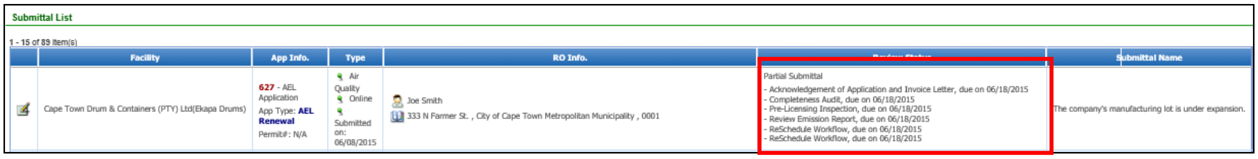
The advanced search options give the user much more flexibility in defining what should be viewed. The key difference is that the advanced filter will allow the user to filter by ‘Department’.

6.1.1.1 Grid View

By default, SAAELIP loads the ‘Submittal Review’ section as a grid view. The grid view lets the user to view submittals by a list.

6.1.2 Summary of Review Status

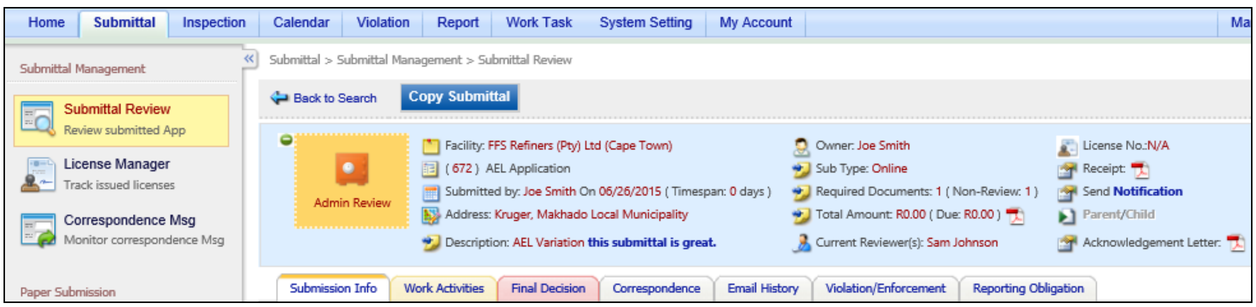
The ability to review submittals by their current status is available in the grid view. This allows the authority user to quickly glance over submittals to understand the current situation of a submission. The ‘Review Status’ currently displays the current scheduled task. If the submittal is complete, it will display ‘Complete’ and if the submittal was withdrawn, it will display ‘Withdrawn’.



Submission Review Status

6.1.3 Submission Info

The ‘Submission Info’ contains all the information that was provided by the applicant. The LA can use this tab to review the attached submission document, the online form, and to view the form as a PDF for printing. By clicking on the icon on the ‘Submittal Review’ section, the submittal ‘Submission Info’ will open up. In this window, SAAELIP provides a header that provides additional detail of the submittal. The header has two active features currently: Receipt and Notification. The receipt function provides the digital record of the submission logging the users IP address. The send notification feature allows the user to e-mail the applicant directly.



Submittal Header

In the actual ‘Submission Info’ module, the user can view the submittal in either PDF format per each section or in a digital version. To view the submittal as a PDF, the user can select from the ‘Form View’ column and click on the section that is desired to be viewed. If the user wants to view the digital version, the same logic would apply but the user would click on the respective field in the ‘Online Form(s)’ column.

Submitted Form List

1 - 9 of 9 item(s)

Online Form(s)	Form View	Archived Form
Online A. General Information		A. General Information - Archived Form
Online B. Contact Information		B. Contact Information - Archived Form
Online C. Raw Materials & Production		C. Raw Materials & Production - Archived Form
Online D. Control Device		D. Control Device - Archived Form
Online E. Stack		E. Stack - Archived Form
Online F. Emission Unit		F. Emission Unit - Archived Form
Online G. Reporting Group		G. Reporting Group - Archived Form
Online H. Activity and Emission		H. Activity and Emission - Archived Form
Online I. Monitoring, Management, & Mitigation		I. Monitoring, Management, & Mitigation - Archived Form

Submittal Documents

The last part of the 'Submission Info' section is the 'Review History'. This displays any significant activities associated with the submittal, such as if the submittal was withdrawn, denied, or in the case below, put on hold.

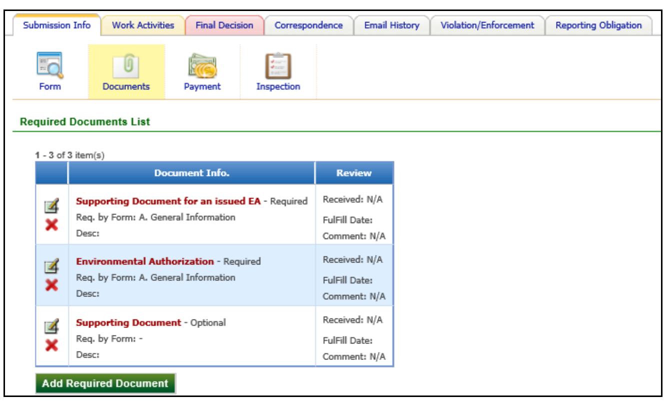
Review History

1 - 6 of 6 item(s)

Status	Updated By	Comment
Partial Submittal	Joe Smith on 06/08/2015	
Amendment	Sam Johnson on 06/08/2015	
Partial Submittal	Joe Smith on 06/08/2015	
Amendment	Sam Johnson on 06/08/2015	
Partial Submittal	Joe Smith on 06/08/2015	
Open	Joe Smith on 06/08/2015	

If the submission had a request for withdrawal, revision, or termination, the status would display in this section for the user to either approve or deny the request.

The 'Submission Info' documents tab displays all current documents associated with the submission. This could range from 'Required Documents' to 'Review' depending on the requirement for the submittal. If documents were received by general mail, the user can scan and upload the documents associated with the submittal in the 'Received Files for Required Documents' section.

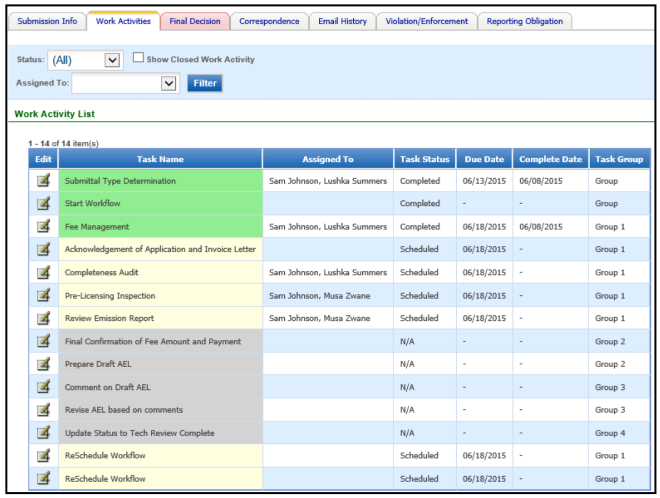


Supplemental Documents for Submissions

6.1.4 Work Activities

Each work flow is broken down into several work activities. Unless all the work activities are completed, a

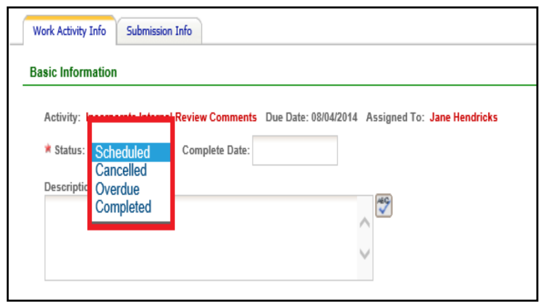
final license cannot be issued. Each work activity has its own logic depending on the requirements specified for each activity. For example, due to the importance of 'Public Advisory Determination', the task is highlighted in orange and once completed, will be green. For more information on the logic feature, please see the appendix submission review and particular submission type. Under 'Submittal Review' and the 'Work Activities' tab, the user can view each task of the review process. The user can either filter by the 'Status' of the task or the 'Assigned To' individual. Work tasks highlighted in green marks the task completed, while tasks in tan means scheduled. Any task that is grey signifies that they are not currently accessible.



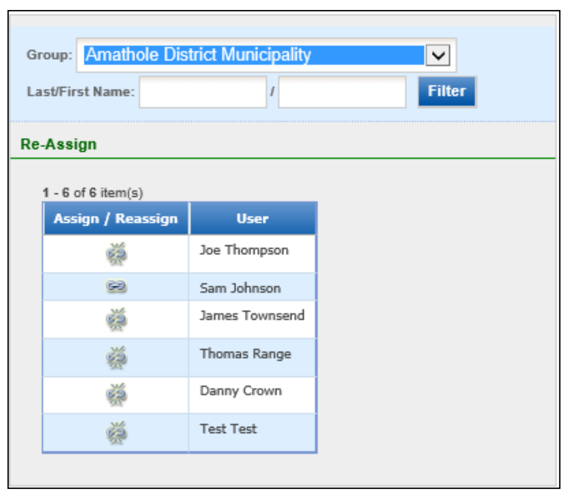
Edit	Task Name	Assigned To	Task Status	Due Date	Complete Date	Task Group
	Submittal Type Determination	Sam Johnson, Lushka Summers	Completed	06/13/2015	06/08/2015	Group
	Start Workflow		Completed	-	-	Group
	Fee Management	Sam Johnson, Lushka Summers	Completed	06/18/2015	06/08/2015	Group 1
	Acknowledgement of Application and Invoice Letter		Scheduled	06/18/2015	-	Group 1
	Completeness Audit	Sam Johnson, Lushka Summers	Scheduled	06/18/2015	-	Group 1
	Pre-Licensing Inspection	Sam Johnson, Musa Zwane	Scheduled	06/18/2015	-	Group 1
	Review Emission Report	Sam Johnson, Musa Zwane	Scheduled	06/18/2015	-	Group 1
	Final Confirmation of Fee Amount and Payment		N/A	-	-	Group 2
	Prepare Draft AEL		N/A	-	-	Group 2
	Comment on Draft AEL		N/A	-	-	Group 3
	Revise AEL based on comments		N/A	-	-	Group 3
	Update Status to Tech Review Complete		N/A	-	-	Group 4
	ReSchedule Workflow		Scheduled	06/18/2015	-	Group 1
	ReSchedule Workflow		Scheduled	06/18/2015	-	Group 1

To view descriptions, documents, and additional information for each work task, the user can click on the icon to display the detail description of the work task. Although each work task screen may differ slightly, the general format is typical of what is shown below. The detailed work task consists of a status, complete date, and description. Keep in mind that only the person assigned to the work task can change, upload documents, or save.

Currently, SAAELIP allows for four types of statuses, which are 'Scheduled', 'Cancelled', 'Overdue', and 'Completed'. Once the task is triggered, the task is defaulted to 'Scheduled. By setting a work task to 'Cancelled', it will grey out the item from the list of tasks in 'Work Activity Info' and will open the next task in the sequence. If the status is set to 'Overdue', the task will be highlighted in red in the 'Work Activity Info' as an overdue task. To complete a task, all the task criteria must be completed such as issuing a license. A complete date is necessary for the task to be saved as 'Completed'.

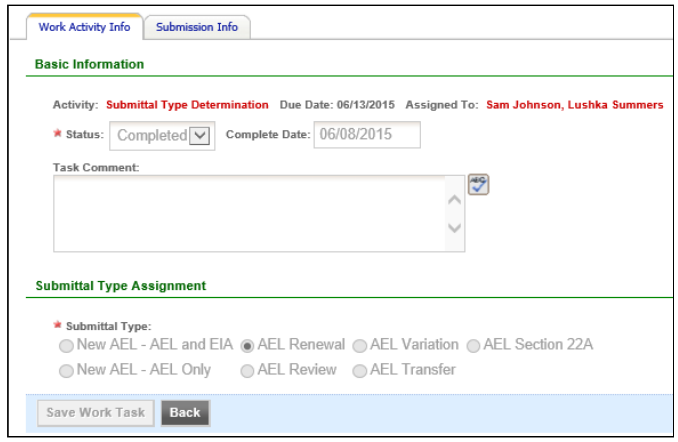


The work task has an additional feature in which users can assign a particular person to the work task. On the right side of the screen, a side bar is displayed where the user can filter system users by groups or by name. By clicking on the 'chain' icon, new users can be assigned or existing users un-assigned to the task. Once the task is completed, the side bar will disappear from the task.



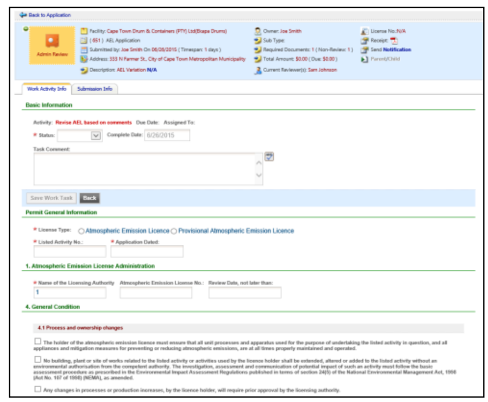
Assigning User Menu

Once a work task is completed, the work task can be accessed but the information cannot be modified. The sections will be greyed out. The only exception is the 'Assigned to' function which will be described further in the review process.

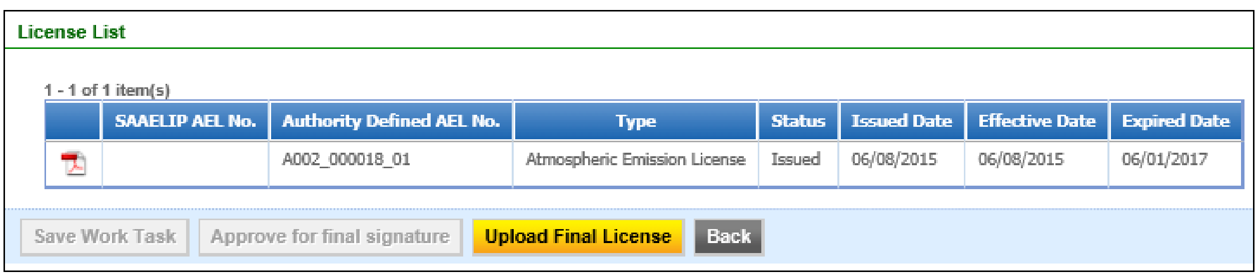


Locked Screen

After a draft AEL has been issued in the work task, the User can update the draft using the only form. The user can check checkboxes and add additional comments or upload reports all in SAAELIP.



Once the 'Issue Final AEL' work task has been completed, the Authority can click on the 'edit' icon to access the work task. The User can download the license and prepare the AEL for issuance to the facility. Once the hard copy AEL is completed, the Authority can upload the document to SAAELIP.



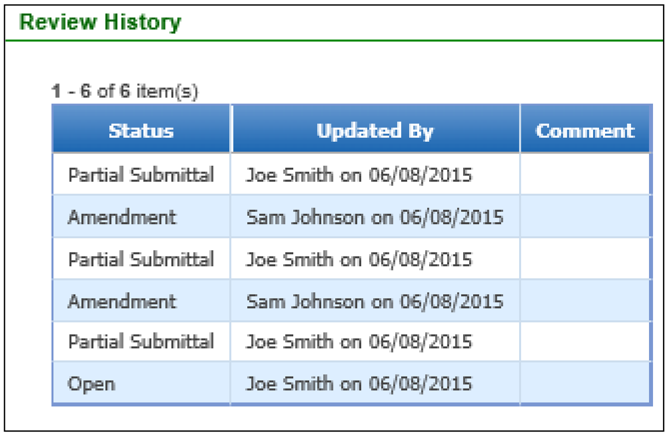
6.1.5 Final Decision

The 'Final Decision' tab allows the user to change the status of a submittal during the work flow process. The current statuses are listed below.

- Admin Review - The submittal is ready for the authority to start the review process.
- Approved - Submittal has been approved and license can be issued to the user/facility.
- Cancelled - Sets the submittal as canceled. All work flow is stopped.
- Denied – Sets the submittal as denied. All work flow is stopped.
- License Issued – The license has been issued to the applicant.
- Public Comment Period Closed – The public participation process is complete.

- Public Comment Period Open – The submittal is in the public participation stage and is waiting for a public announcement date.
- Revision – The submittal was requested and approved for revision. The submittal can no longer be altered and all work flow is halted. A new submittal was created with the data from the revised submittal.
- Tech Review Completed – All attachments have been submitted, fee has been paid in full, and submittal form is complete; Submission ID remains the same when status is updated.
- Technical Review – Default status when reviewing an submittal
- Withdrawal - Sets the submittal as withdrawn. All work flow is stopped.

The user can monitor the actions taken by referring to the 'Review History' grid below the 'Decision' section.

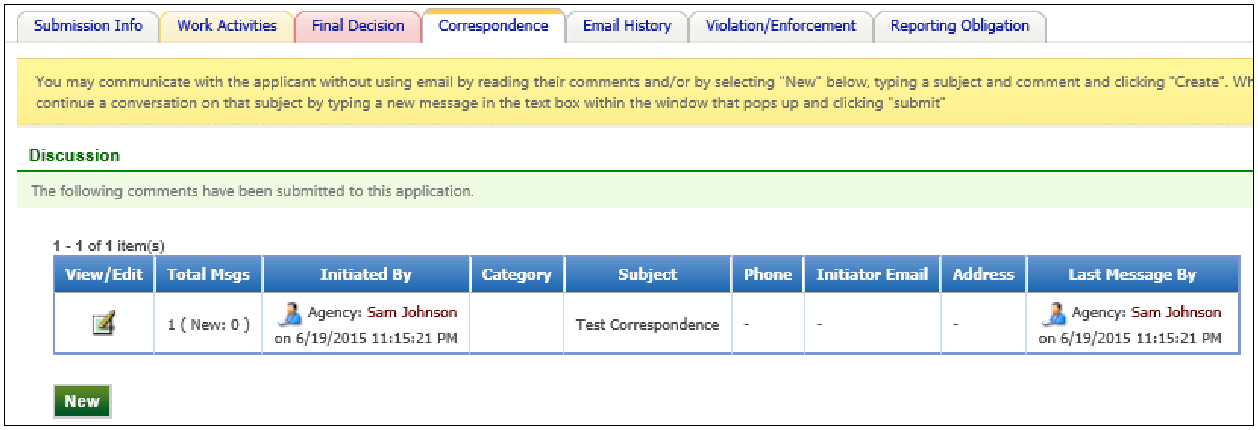

Review History

1 - 6 of 6 item(s)

Status	Updated By	Comment
Partial Submittal	Joe Smith on 06/08/2015	
Amendment	Sam Johnson on 06/08/2015	
Partial Submittal	Joe Smith on 06/08/2015	
Amendment	Sam Johnson on 06/08/2015	
Partial Submittal	Joe Smith on 06/08/2015	
Open	Joe Smith on 06/08/2015	

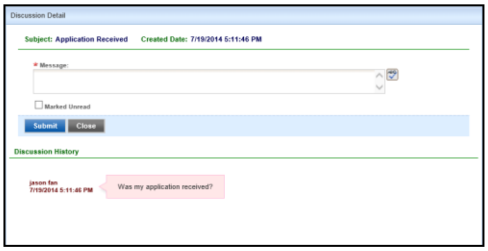
6.1.6 Correspondence

SAAELIP provides an additional feature for allowing the authority to notify the applicant. Being able to contact the applicant is necessary to resolve any issues that require attention and effectively lessen the time needed to resolve any issues. The 'Correspondence' section can be accessed in two different ways. If a facility user has sent a correspondence to the LA user who is responsible for their submittal, a notification on the dashboard's 'Message Center' will be displayed. Unread messages are tagged with a yellow flag as an indicator.



View/Edit	Total Msgs	Initiated By	Category	Subject	Phone	Initiator Email	Address	Last Message By
	1 (New: 0)	Agency: Sam Johnson on 6/19/2015 11:15:21 PM		Test Correspondence	-	-	-	Agency: Sam Johnson on 6/19/2015 11:15:21 PM

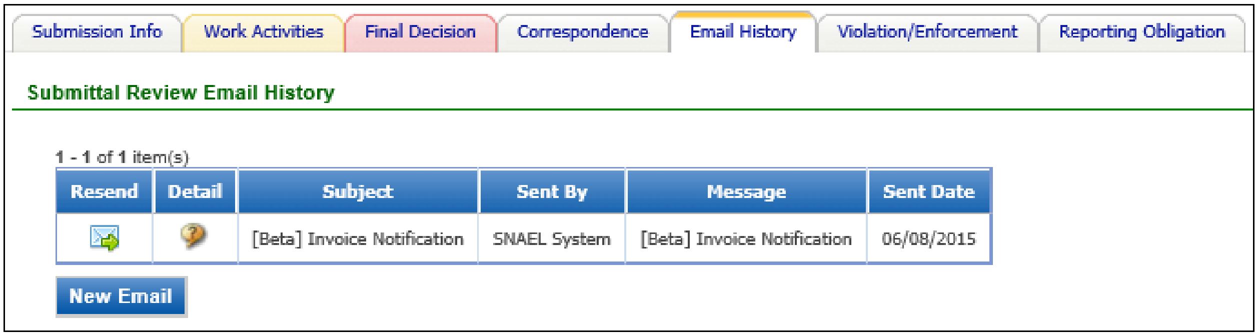
By clicking on the icon, the conversation detail can be viewed. The screen displays the user who sent the correspondence and a time stamp of when the correspondence was sent.



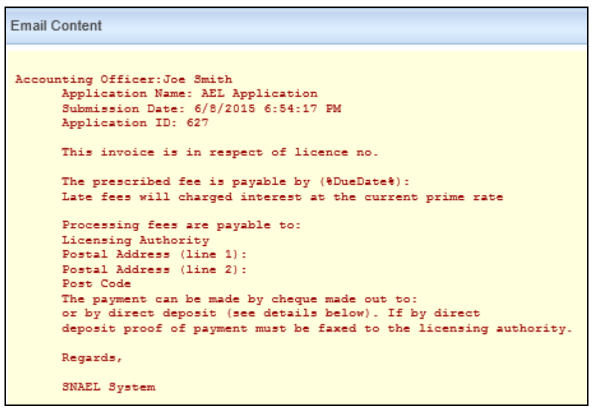
If no correspondence exists, one can be created by clicking on 'New'. The below window will display asking for a 'Category' in reference to the matter described in the correspondence. Both the subject and message are mandatory fields in order for the message to be sent.

6.1.7 Email History

SAAELIP maintains a history of all emails pertaining to each submittal. This provides an easy method of record keeping of when they were notified by the SAAELIP system and the details of the e-mail. Only e-mails generated by SAAELIP are stored in this section. LA users can utilize the 'Email History' section for reference of what notifications the facility user received. By clicking on the icon, the user can view the notification that was sent to the facility user. The LA user can resend the notification in situations where the facility user did not receive the notification the first time.



E-mail History Gridview


Email Content

Accounting Officer:Joe Smith
Application Name: AEL Application
Submission Date: 6/8/2015 6:54:17 PM
Application ID: 627

This invoice is in respect of licence no.

The prescribed fee is payable by (%DueDate%):
Late fees will charged interest at the current prime rate

Processing fees are payable to:
Licensing Authority
Postal Address (line 1):
Postal Address (line 2):
Post Code
The payment can be made by cheque made out to:
or by direct deposit (see details below). If by direct
deposit proof of payment must be faxed to the licensing authority.

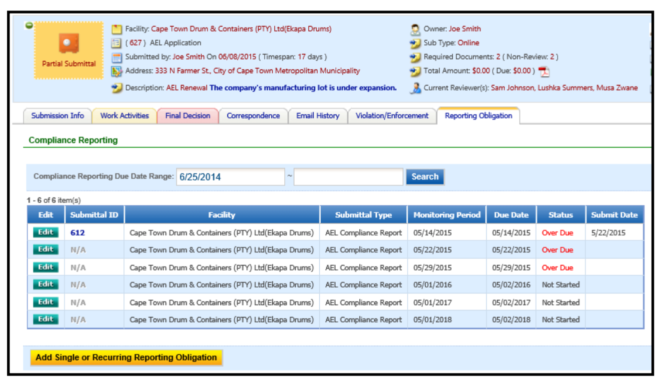
Regards,

SNAEL System

E-mail History View

6.1.8 Violation/Enforcement

The "Violation/Enforcement" tab within Submittal Review is for the Authority to view any violations and related enforcements that are associate to that specific submittal or license.



6.1.9 Reporting Obligation

The "Reporting Obligation" tab allows the Authority to assign compliance reporting responsibilities for that submittal. The Authority can add a single or recurring reporting obligations by clicking the button at the bottom of the page. The User can also edit existing reporting obligations by clicking the "Edit" button next to the requirement they wish to update.

6.2 *License Manager*

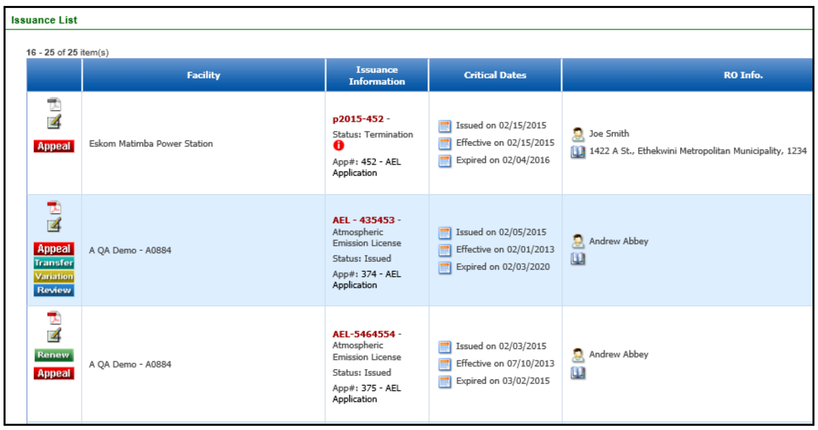
The 'License Manager' provides a useful tool in managing licenses that were issued through SAAELIP. The module can be found under the 'Submittal' drop down menu. The license management module offers the Applicant the following features:

- Amend licenses
- Set license status
- Set effective dates
- View physical license

The basic search functions allow the user to search licenses via certain input parameters such as 'Submittal ID', 'License Number', 'Site Address', and 'Facility Name'. The licenses can be further filtered by type of license with the 'App List' function.

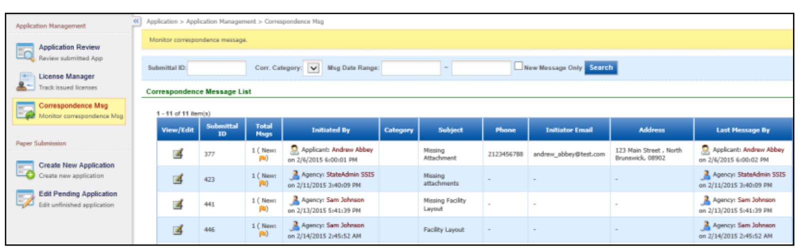
By clicking the 'Advanced Search' option, the user can search licenses by the date range of submission/license date, category, department, and by type. Once the desired license is found, the user has several options they can select from.

By clicking on the icon, the user can change the status of the license. The edit button when selected will open a pop up where the user can define the effective license dates and status and add comments. Currently the license statuses can be set as 'Issued', 'Terminate', and 'Extension'. If the user just wants to view the license, then the user can click on the icon to load a digital copy of the license.



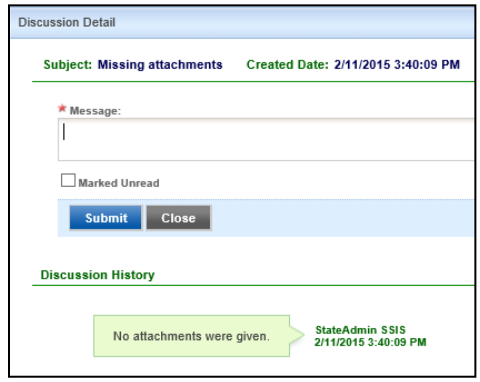
6.3 *Tracking Correspondences with Applicants*

SAAELIP provides a messaging utility, 'Correspondence', which allows the applicants to communicate to the LA directly. The Authority has several different ways to access this section. The user can access this section via the dashboard's 'Message Center' or the submittal itself as detailed in the earlier sections. The user can also utilize the 'Correspondence' module which can be found under the 'Submittal' tab. New messages are signaled by the icon that appears in the 'Total Messages' column.



The correspondences are connected through the submittal identification. In order to find the correspondence the user is looking for, SAAELIP provides a basic search above the grid view. The user can search by the 'Submittal ID', 'Correspondence Category', or the 'Date Range'. The user can also filter the list by limiting the search to new messages by clicking on the checkbox for 'New Messages Only'.

By clicking on the icon, the user can view the detail of the correspondence for the selected submittal. The screen will provide a prompt to allow the user to respond back to the applicant. The detail view provides the subject, create date, conversation, applicant name, and timestamps of when each message was sent. The user can also mark the conversation as unread by checking the checkbox. This allows the user to filter and come back to respond to the applicant at a later date.



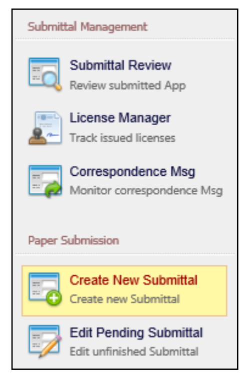
Correspondence Menu

6.4 *Manage Paper Submissions*

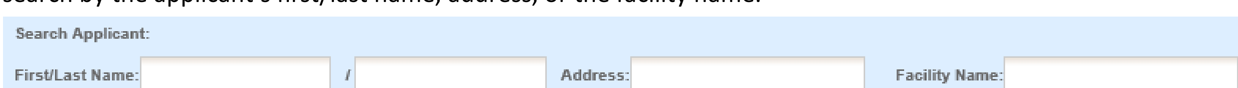
When the LA receives a paper submission, SAAELIP provides the authority a way to enter and store the information in SAAELIP. This allows the authority to have an additional tool to manage paper submission alongside electronic submissions.

6.4.1 Create New Submittal

In many cases, applicants will send a paper submission rather than through SAAELIP. SAAELIP has the ability to process paper submissions through the 'Paper Submission' section under 'Submittals'. Once a paper submittal is received, the authority will need to determine which category the submittal would fall under. Once determined, the user can go to the 'Submittal Module' and under 'Paper Submission', click 'Create New Submittal' to start the process.



At this point, the user can select the type of submittal necessary and begin the submission process. The first part of the process involves selecting the applicant for the submittal. SAAELIP provides a search toolbar in order to search by the applicant's first/last name, address, or the facility name.



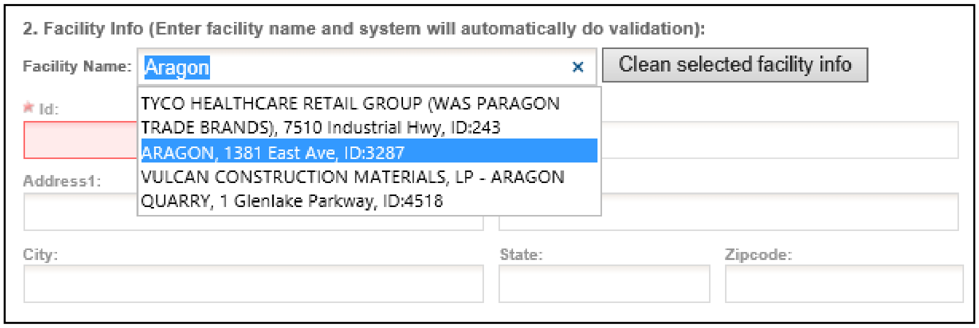
Applicant Search Tool Bar

If the applicant exists, please select the radio button to make the selection and click 'Create Submittal'. If the user does not exist, then click on 'New Applicant'.

	User Name	First Name	Last Name	Email	Phone	Address	Apt/Unit/Other	City	State	Zip Code	Facility
○	TTest123	Test	Test123	Test12345@ymail.com	0275555555	123456 Test Drive		Test	EC	12345	N/A

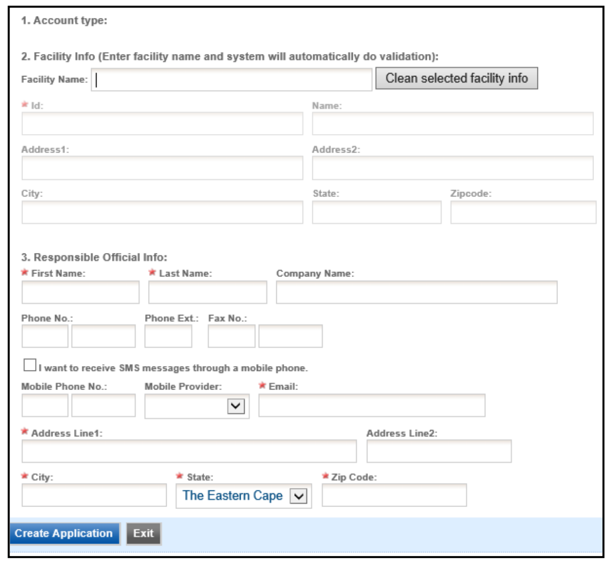
Applicant Search Grid View

The new applicant option allows the user to enter in the 'Account Type' the user is responsible for. The facility name contains an auto-fill feature. This allows the user to partially type in a facility name and allow the user to select from facilities that match what already has been entered.



New Applicant Facility Association

The 'First Name', 'Last Name', 'Phone Number', 'Email', 'Address', 'State', and 'Zip Code' are required fields. The Email must be unique to the system or it will generate an error in the creation process.

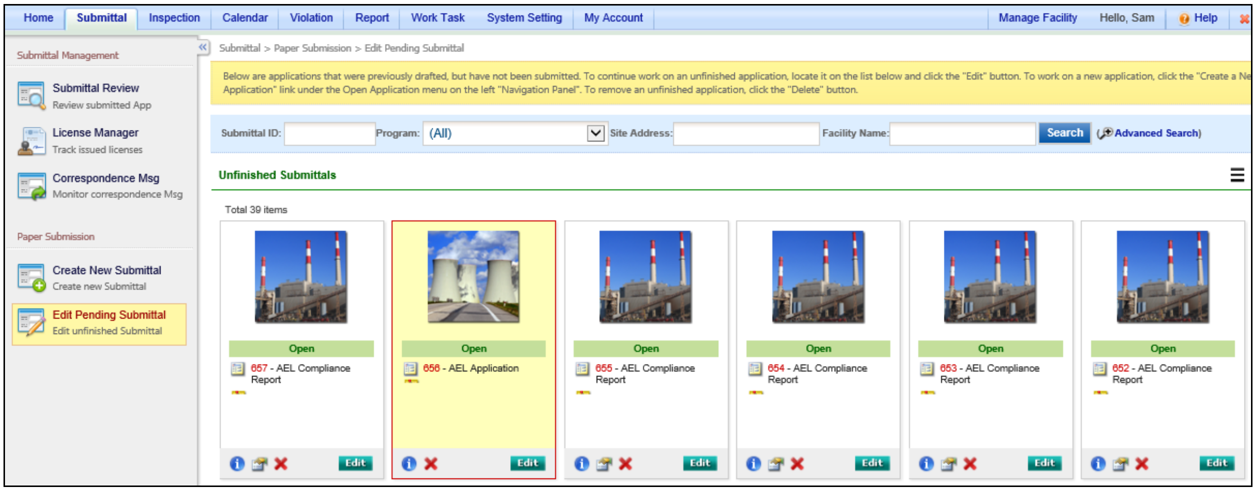


New Applicant Account General Information

At this point, the LA will be able to continue on in filling the submittal. For more information of the different submittal types and process, please see section 9.6.

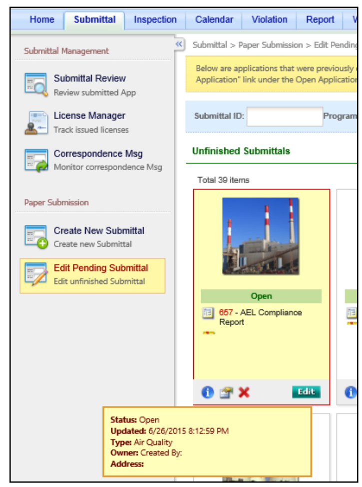
6.4.2 Edit Pending Submittal

In certain cases the user might have not finished a paper submittal completely so SAAELIP has them categorized under pending submittals. These submittals can be found under the submittal tab -> paper submission -> edit pending submittal. The page is defaulted to list the submittal as a gallery view.



Edit Pending Submittal Gallery View

By placing the mouse over the icon, the user will be able to view additional details pertaining to the submittal such as the status, updated date/time, owner, and full address. The user can also at this point decide that the submittal is no longer needed and can delete the pending submittal by clicking on the icon. Clicking the 'edit' button allows the user to continue on finishing the submittal from the point when the last submittal was saved.

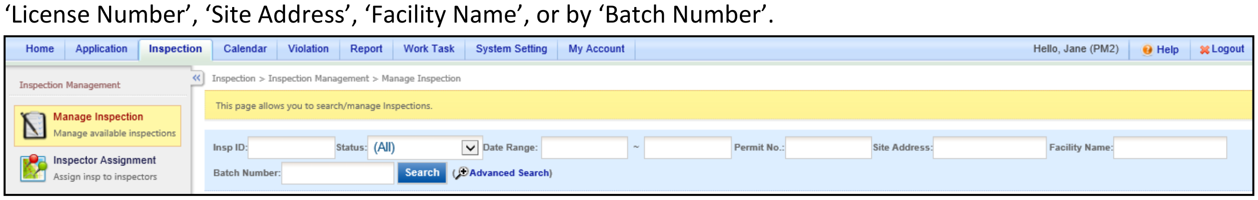


Edit Pending Submittal Mouse Over

6.5 *Inspection Management*

'Pre-Licensing Inspection' is a work task during AEL assessment process. SAAELIP will automatically schedule a Pre-Licensing Inspection for each AEL submittal, and assign to the corresponding personnel. Besides going to the corresponding work task to view/edit/complete an inspection, SAAELIP also provides 'Inspection' module for Authority user.

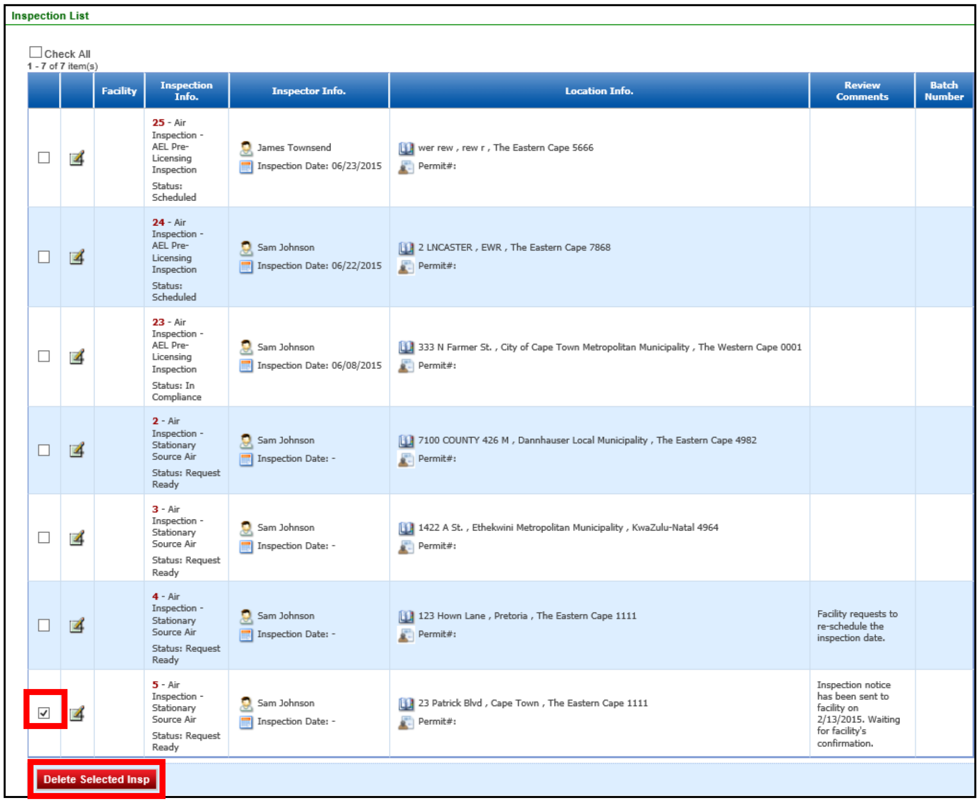
The 'Inspection Management' provides the necessary tools to schedule, manage, and give visibility on inspections. SAAELIP provides a search tool to search for inspections based on the 'Inspection ID', 'Status', 'Date Range', 'License Number', 'Site Address', 'Facility Name', or by 'Batch Number'.



Inspection Management Search Toolbar

If additional search parameters are needed, the user can use the 'Advanced Search' feature to filter by inspection type and inspector.

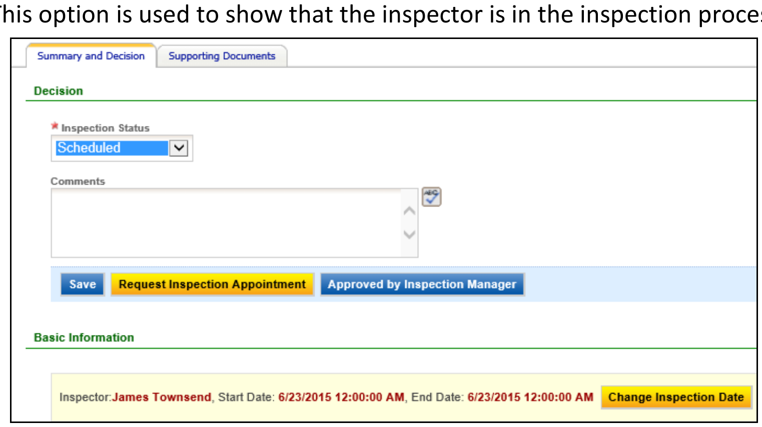
If any inspection was scheduled in error and needs to be deleted, the user can select the checkboxes for the desired inspection and delete by clicking on the 'Delete Selected Insp' button below the grid view. Inspections that have been set as 'Compliant' and 'Out of Compliance' and marked as approved by the inspection manager cannot be deleted and the checkbox will be hidden for those inspections.



Inspection Grid View

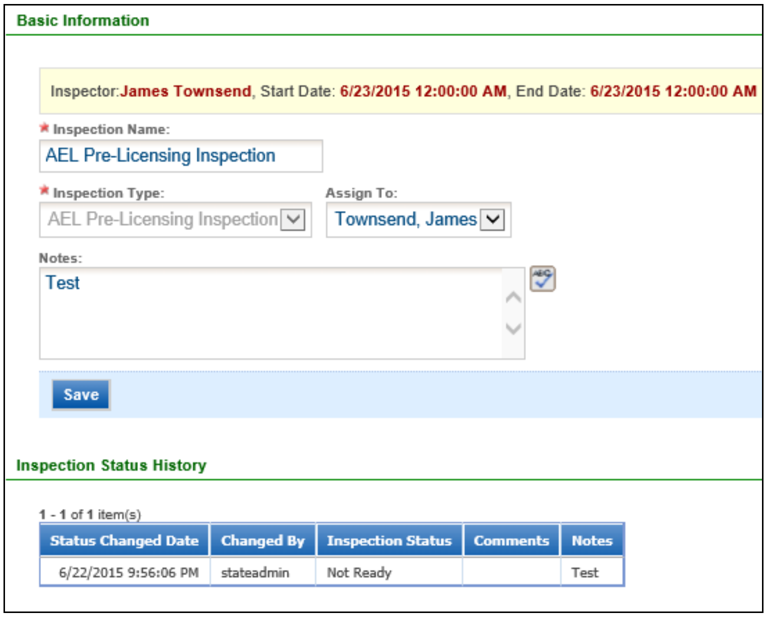
By selecting the icon, the user can enter the detail inspection view. The user can change the inspection status to the several different options listed below:

- Scheduled: This option is the default option once an inspection has been created.
- In Compliance: Once an inspection is set as 'In Compliance', the user can only change the status to 'Out of Compliance'.
- Out of Compliance: Once an inspection is set as 'Out of Compliance', the user can only change the status to 'Out of Compliance'.
- Not Ready: This indicates that the facility is still not ready for inspection.
- In Progress: This option is used to show that the inspector is in the inspection process



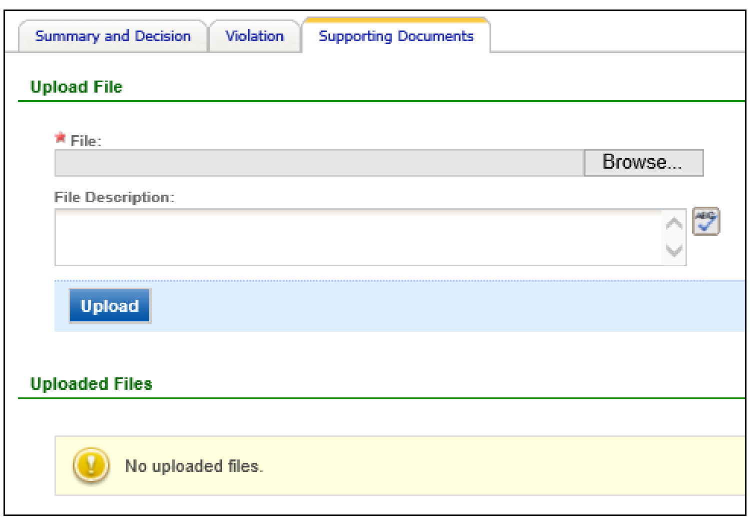
Inspection Detail View

The user can enter in additional comments at any time before the inspection is approved by the inspection manager. The inspector can also change the inspection date as long as the inspection status is not set as scheduled. The inspection can be given a name to identify the inspection and the inspector can be also altered. SAAELIP tracks the status changes made in the 'Inspection Status History'.



Inspection Status History

The user can also upload supporting documents to go along with the inspection and provide a description. This allows the user to keep records of the inspection such as images taken during the inspection.



7 Performance Metrics Tracking

With so many different features in SAAELIP, SAAELIP provides reporting and task management tools to allow the user gain better visibility of the work task status and progress. Currently SAAELIP allows for the following different types of reporting:

- Submittal Processed
- Intermediate Milestone
- Pending Submittals

The above only list out reports related to performance metrics tracking. In addition to above, SAAELIP also provides additional canned reports for Authority users to track:

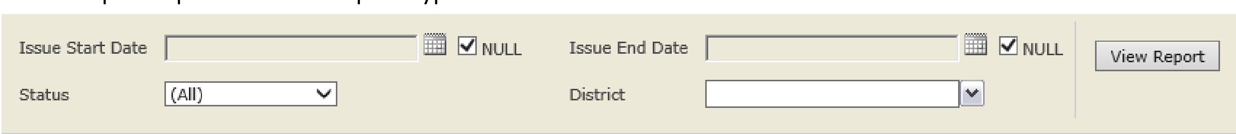
- AEL Facility and Contact Listing
- AEL License Status Report
- AEL Submission Summary Report
- AEL Submission History Report
- Emission History Report

7.1 *Overview of Report Viewer Functions*

7.1.1 Filtering Criteria

From the report filtering criteria section, records selection can be set based on different individual criteria.

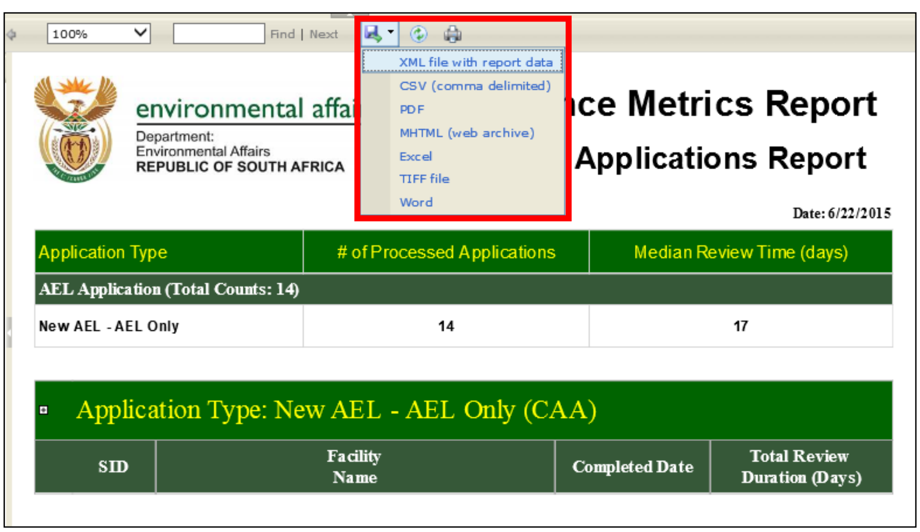
For example: Report Name or Report Type can be used to filter the search results



Report Filter Tool

7.1.2 Export & Print Report

Reports can be saved by clicking the disk icon. Report can also be exported to different format, such as XML, CSV, PDF, Excel or Word.



Exporting Report Function

7.2 *Submittals Processed Report*

The 'Application Processed Report' provides a breakdown of the different types of submittals that were processed and the median review time.

Application Type	# of Processed Applications	Median Review Time (days)
AEL Application (Total Counts: 27)		
AEL Renewal	4	123
AEL Section 22A	1	69
AEL Transfer	2	107
AEL Variation	3	48
New AEL - AEL and EIA	3	46
New AEL - AEL Only	14	17

Submittal Processed Report Example

The navigation bar on the side allows the user to look up submittals that were used in generating the report. By double clicking on the individual submittal number, the user will be directed towards the detail submittal section of the report. This provides the user with a high visibility of the amount of time a submittal review process takes. Be sure to click the ⊞ icon to open the report to view the full details.

Document Map

- ⊟ RPT_APPLICATION_PROCESSED
  - ⊟ AEL Renewal
    - 518
    - 552
    - 565
    - 627
  - ⊟ AEL Section 22A
    - 524
  - ⊞ AEL Transfer
  - ⊞ AEL Variation
  - ⊞ New AEL - AEL and EIA
  - ⊞ New AEL - AEL Only

Submittal Processed Report Side Bar

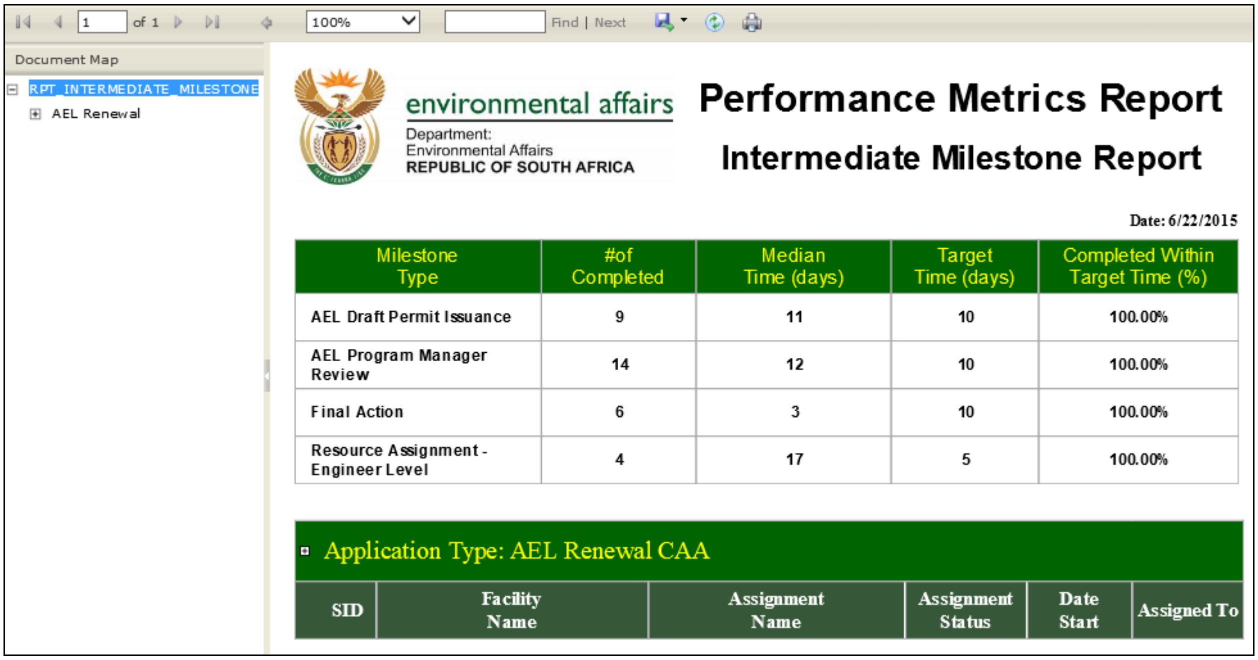
⊟ Application Type: AEL Renewal (CAA)

SID	Facility Name	Completed Date	Total Review Duration (Days)
518	Khulani Timber Industries (Pty) Ltd	05/18/2015	107
552	FFS Refiners (Pty) Ltd (Cape Town)	05/20/2015	140
565	FFS Refiners (Pty) Ltd (Cape Town)	05/20/2015	140
627	Cape Town Drum & Containers (PTY) Ltd(Ekapa Drums)	06/08/2015	2

Submittal Report Expand Feature

7.3 *Intermediate Milestones Report*

The 'Intermediate Milestone Report' plays an intricate role in informing the user how long it has taken a task to be completed for a particular submittal. As an example, the AEL Renewal form was selected. The report displays all the work activities associated with the particular submittal. The report then breaks down the number of submittals completed and the length it took to complete.



Milestone Type	#of Completed	Median Time (days)	Target Time (days)	Completed Within Target Time (%)
AEL Draft Permit Issuance	9	11	10	100.00%
AEL Program Manager Review	14	12	10	100.00%
Final Action	6	3	10	100.00%
Resource Assignment - Engineer Level	4	17	5	100.00%

Application Type: AEL Renewal CAA

SID	Facility Name	Assignment Name	Assignment Status	Date Start	Assigned To

Intermediate Milestone Report Example

By utilizing the side navigation bar, the user can navigate to a particular submittal in question. The detail reporting provides information like the status, date started, and assigned to for each particular task for that submittal type. This provides the user with a high visibility of each type of work task.

Application Type: AEL Renewal CAA

SID	Facility Name	Assignment Name	Assignment Status	Date Start	Assigned To
518	Khulani Timber Industries (Pty) Ltd	Final Action	Completed	05/20/2015	Sam Johnson
518	Khulani Timber Industries (Pty) Ltd	Final Action	Completed	05/20/2015	Sam Johnson
518	Khulani Timber Industries (Pty) Ltd	Resource Assignment - Engineer Level	Completed	05/20/2015	Sam Johnson, Lushka Summers
518	Khulani Timber Industries (Pty) Ltd	AEL Program Manager Review	Completed	05/20/2015	Sam Johnson, Lushka Summers
518	Khulani Timber Industries (Pty) Ltd	AEL Program Manager Review	Completed	05/20/2015	Sam Johnson
518	Khulani Timber Industries (Pty) Ltd	AEL Program Manager Review	Completed	05/20/2015	Sam Johnson, Lushka Summers
518	Khulani Timber Industries (Pty) Ltd	AEL Program Manager Review	Completed	05/20/2015	Sam Johnson, Musa Zwane

Intermediate Milestone Report Detail Example

7.4 *Pending Submittals Report*

The ‘Pending Application Report’ can be filtered by submittal type and age. In this case, AEL Renewal submittals were used to generate the results. The report will provide the number of total submittals not completed.

environmental affairs
Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Performance Metrics Report

Pending Applications Report

Date: 6/22/2015

Application Type	# of Pending Applications
AEL Application (Total Counts: 1)	
AEL Renewal	1

Application Age	# of Applications
0-3 Months	1
3-6 Months	0
6-9 Months	0
9-12 Months	0
12-18 Months	0
18-24 Months	0
24-36 Months	0
> 36 Months	0

Pending Submittal Report Example

The submittal detail will be listed by the submittal number. It will show the submittal number, the most current task, status, start date, and assigned user.

Application Type: AEL Renewal CAA

SID	Facility Name	Assignment Name	Assignment Status	Start Date	Assigned To
627	Cape Town Drum & Containers (PTY) Ltd(Ekapa Drums)	AEL Program Manager Review	Scheduled	06/08/2015	

Pending Application Report Detail

8 NAEIS – Annual Emission Inventory Reporting

8.1 *NAEIS Master List Preparation*

The Master List module provides the functions to prepare the master lists and to publish the lists to facility users. This is the first step in the annual NAEIS EI Reports Preparation Process.

To access the "Master List" function, go into the Source Management Module, then click on the **Master List** menu option on the left panel.

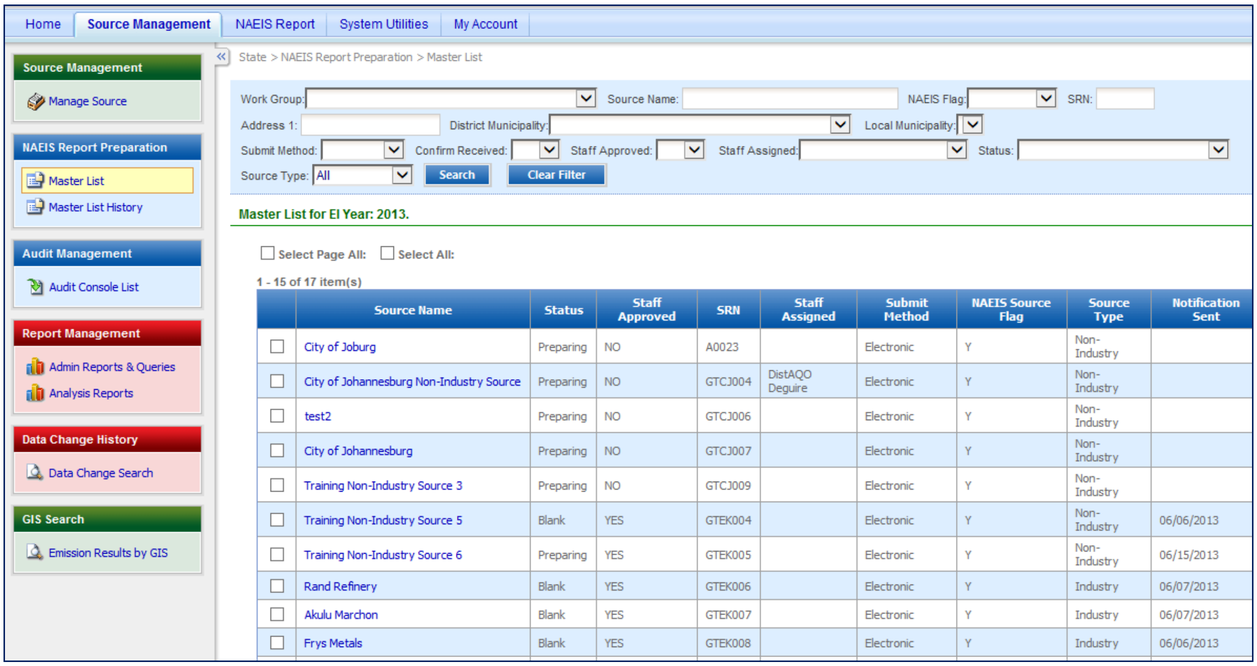


Figure 7.1 Web Page of Master List Management

In the search panel (Figure 7.1), specify the desired search criteria and click on the **Search** button to find the desired sources. The search criteria on the Master List Page include:

- Work Group (District)
- Source Name
- NAEIS Flag
- SRN
- Address
- District Municipality
- Local Municipality
- Submit Method
- Confirm Received
- Staff Approved
- Staff Assigned
- Status: (This is the processing status of each report)

To reset the user-entered search criteria, click on the **Clear Filter** button. Once clicked, the previously entered values in the search panel will be removed.

The following buttons are available in the Master List web page (Figure 7.2 & 7.3):

- **Export to Excel** – exports the searched results to excel format
- **Approve by WorkGroup Staff** – approves source from a Work Group staff (the first level of QA/QC)
- **Approve by Supervisor** – approves source from a Supervisor (the second and final level of QA/QC)
- **Add Source to Masterlist** – adds a source not in the current year Masterlist into the Masterlist
- **Remove Source** – remove source from the current year Masterlist.
- **Publish** – Publish the source. This will make the status change from “Prepared” to “Blank”.
- **Reports** – Display reports about the Masterlist
- **eNotify** – Notify Industry users for their obligation to report for the current EI Year
- **Confirm** – Manually confirm the receipt of e-mail for Industry users
- **Delete All** – removes all sources from the Masterlist and regenerates the Masterlist
- **Delete** – removes only the selected sources from the Masterlist and regenerates those sources
- **Calculate Emissions for Searched Sources** – calculate emissions for the selected sources
- **Calculate Nation-wide Emissions** – calculate emissions for the whole Masterlist

Note that these buttons will be explains in further detail later on in this section.

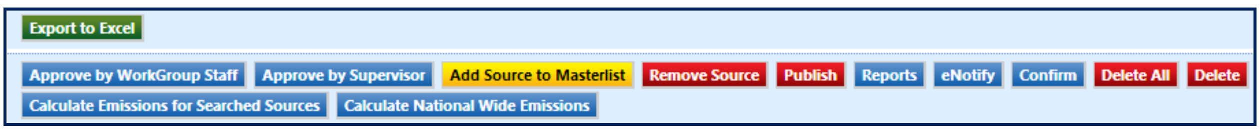


Figure 7.2 Web Page of Master List Management - Buttons

Users with different application security settings may see different buttons displayed on the Master List web page. For example, the "Approve by Supervisor" button is only available to the user with the "District Supervisor" access security role.

8.1.1 Generate Master List

At the beginning of each reporting year, the National Authority will initiate the generation of the Master List. The Master List generation is only available after the 15th of January each year. For example, if you want to generate the Master List for reporting year 2013, the function will be available after January 15, 2013. To generate the Master List, click the **Generate Master List** button (Figure 7.3).

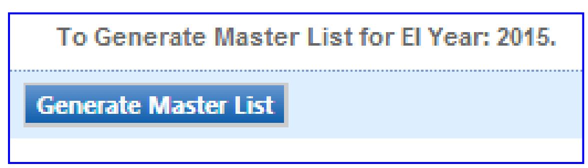


Figure 7.3 Master List Generations

Once the Master List is generated, the **Generate Master List** button will become invisible, and the initialized Master List will show in the page.

Note that because this is the responsibility of the National Authority, the **Generate Master List** button will only available to users of a National capacity.

8.1.2 Approve Master List

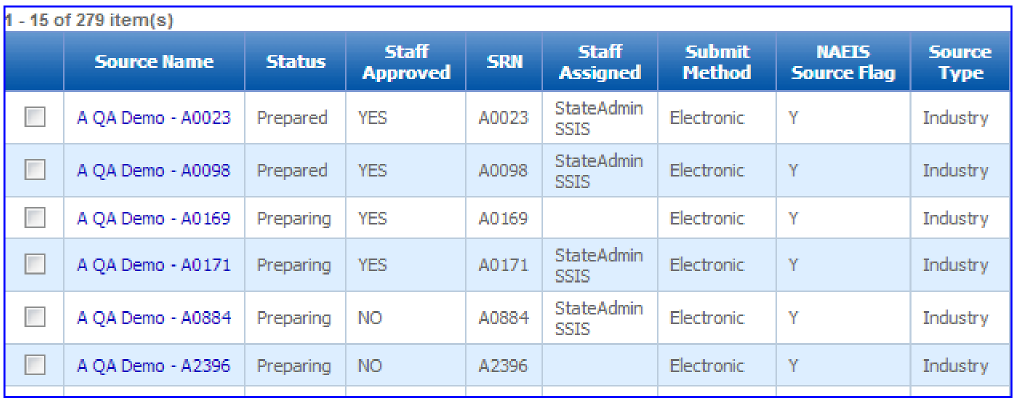
The approval of the Master List is a two-step process. Each district staff member should approve the Master List under his/her name, and then the district supervisor will issue the final approval. However, for some

districts, there may not be the capacity for district staff members to perform the first step of approval. In this case, the supervisor may bypass the first step and directly click the **Approve by Supervisor** button.

Approve by WorkGroup Staff: District staff users may need to review the sources listed in the Master List. If the list is verified to be correct, click on the **Approve by WorkGroup Staff** button to approve the source list.

Approve by Supervisor: After the Master List is verified and approved by district staff, the district supervisor will issue the final approval on the Master List by clicking on the **Approve by Supervisor** button.

When a source is approved by the district supervisor, its EI Report status will be changed from **"Preparing"** to **"Prepared".**



1 - 15 of 279 item(s)

	Source Name	Status	Staff Approved	SRN	Staff Assigned	Submit Method	NAEIS Source Flag	Source Type
☐	A QA Demo - A0023	Prepared	YES	A0023	StateAdmin SSIS	Electronic	Y	Industry
☐	A QA Demo - A0098	Prepared	YES	A0098	StateAdmin SSIS	Electronic	Y	Industry
☐	A QA Demo - A0169	Preparing	YES	A0169		Electronic	Y	Industry
☐	A QA Demo - A0171	Preparing	YES	A0171	StateAdmin SSIS	Electronic	Y	Industry
☐	A QA Demo - A0884	Preparing	NO	A0884	StateAdmin SSIS	Electronic	Y	Industry
☐	A QA Demo - A2396	Preparing	NO	A2396		Electronic	Y	Industry

Figure 7.4 Approved by WorkGroup/Supervisor

8.1.3 Add/Remove Source

To add a source to the Master List, click the **Add Source** button to display the **Add Source** window (Figure 7.4).

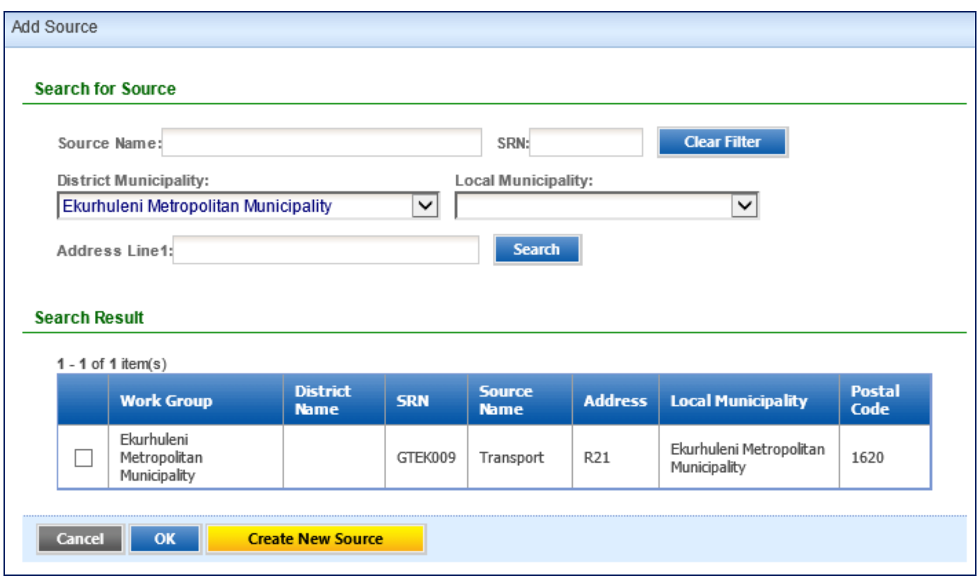


Figure 7.5 Pop-up window of Adding a Source

Users have the options of searching for an existing source by Source Name, SRN, Address, District Municipality, or Local Municipality.

To search for a source, enter the desired text into the search fields, and then click on the Search button to search for the desired source.

When the search is completed, applicable results will be shown in the Search Result section. Select any source(s) to add to the Master List by clicking the checkbox in front of the Source Name.   Click the **OK** button to add the selected source(s) into the Master List.

If the source is a new source (does not exist in the NAEI system), click on the **Create New Source** button to create the source record (see instructions in Chapter 6), then return to the Master List section to add the newly created source(s).

To remove a source from the Master List, select the source from the Master List grid-view (Figure 7.1), then click on the **Remove Source** button. The Remove Source window from the Master List will display (Figure 7.6).

In the pop up window, select “No” from the NAEIS Flag drop-down list. If this source has stopped operation, enter the End Operation Date.

In the Comments textbox, enter the applicable reason for the removal of the source from the Master List.

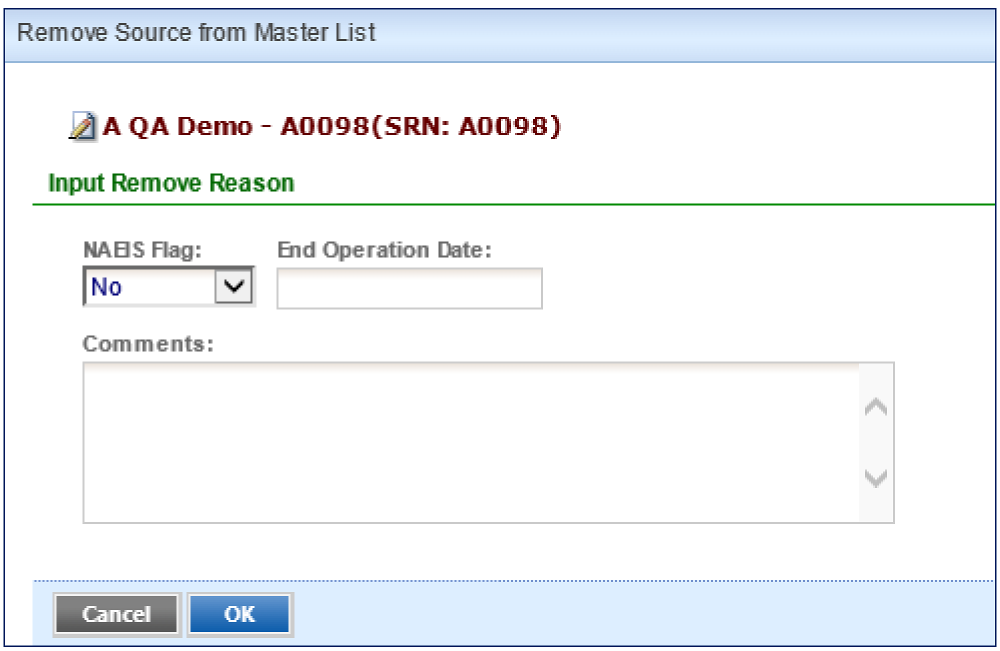


Figure 7.6 Pop-up window of Removing a Source

8.1.4 Publish Master List

When a source(s) has been approved by the district supervisor on the current year’s Master List, the supervisor will publish the source to the Facility side. Select one or more source(s) in the Master List grid-view, and then click on the **Publish** button (Figure 7.2). The status of source will change from **“Prepared”** to **“Blank”**.

8.1.5 Email Notification and Confirmation

To notify facility users about the obligation to report for the current year, select the applicable source(s) and click on the **eNotify** button. The Email Template window will be displayed (Figure 7.6). Modify the email contents (as needed) and click on the **Send** button to send the email(s) to facility users.

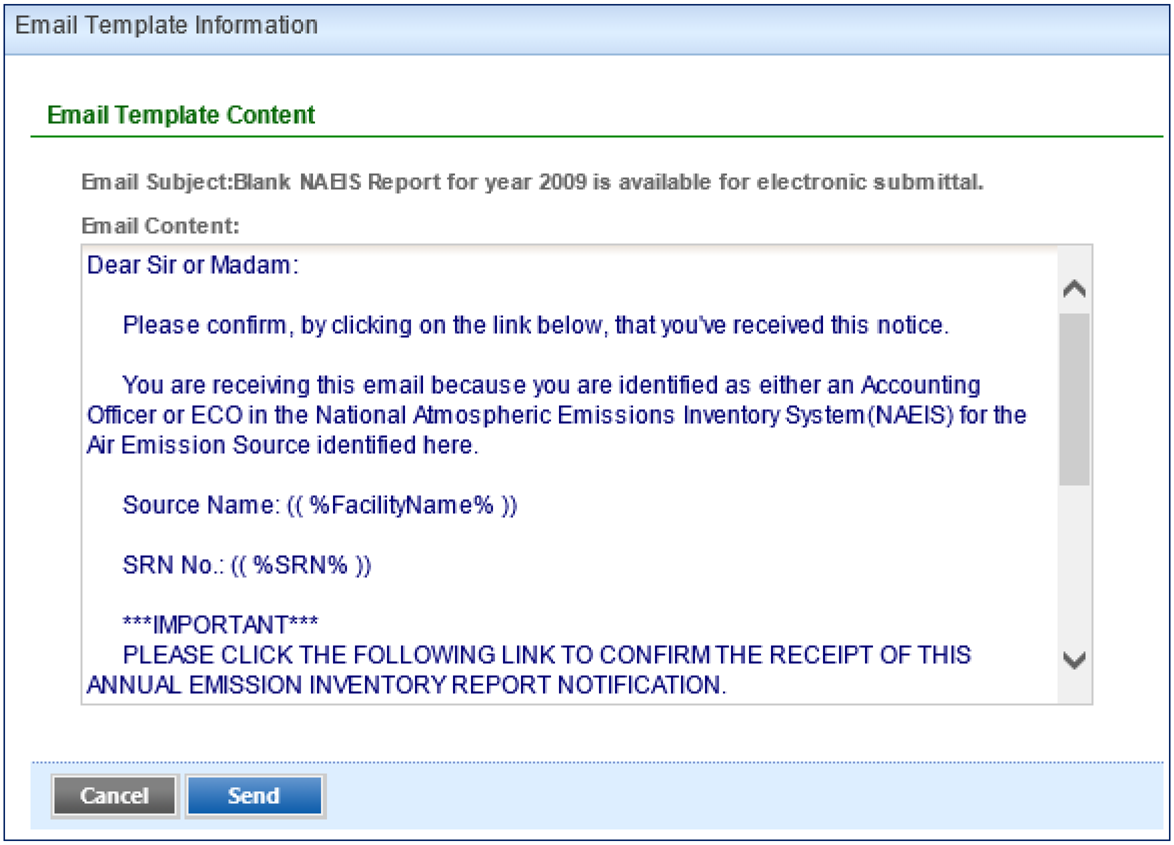
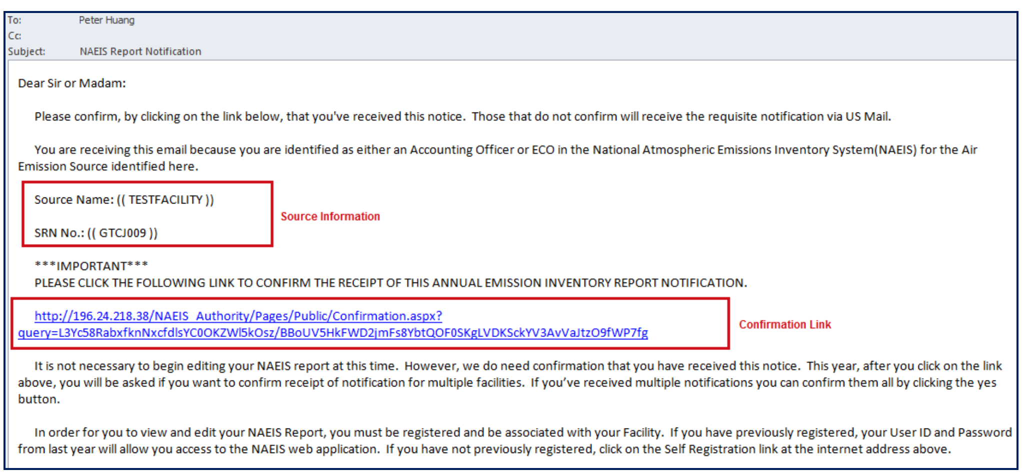


Figure 7.7 Pop-up Window of Email Notification

When facility users receive the email notification of the published Master List, they may click on the link in the email text to confirm the receipt of notification (Figure 7.8).



To: Peter Huang
Cc:
Subject: NAEIS Report Notification

Dear Sir or Madam:

Please confirm, by clicking on the link below, that you've received this notice. Those that do not confirm will receive the requisite notification via US Mail.

You are receiving this email because you are identified as either an Accounting Officer or ECO in the National Atmospheric Emissions Inventory System(NAEIS) for the Air Emission Source identified here.

Source Name: ((TESTFACILITY))

SRN No.: ((GTCJ009))

Source Information

IMPORTANT
PLEASE CLICK THE FOLLOWING LINK TO CONFIRM THE RECEIPT OF THIS ANNUAL EMISSION INVENTORY REPORT NOTIFICATION.

http://196.24.218.38/NAEIS_Authority/Pages/Public/Confirmation.aspx?query=L3Yc58RabxfknNxcfdlsYC0OKZWl5kOsz/BBoUV5HkFWD2jmFs8YbtQOF0SKgLVDKSckYV3AvVaJtzO9fWP7fg

Confirmation Link

It is not necessary to begin editing your NAEIS report at this time. However, we do need confirmation that you have received this notice. This year, after you click on the link above, you will be asked if you want to confirm receipt of notification for multiple facilities. If you've received multiple notifications you can confirm them all by clicking the yes button.

In order for you to view and edit your NAEIS Report, you must be registered and be associated with your Facility. If you have previously registered, your User ID and Password from last year will allow you access to the NAEIS web application. If you have not previously registered, click on the Self Registration link at the internet address above.

Figure 7.8 Email of Notification

If facility users notify the state staff that they have received the notification by mail, phone or other media, authority users may click on the **Confirm** button in the Master List page to confirm the receipt of EI Report notification.

8.1.6 Delete and Regenerate Master List

At any time before any source is published to facility users, if authority users feel the entire Master List needs to be regenerated, click on the **Delete All** button, and repeat the Master List generation process (see section 7.1).

At any time during the reporting process, if a particular source record needs to be re-generated, select the source from the Master List and click the **Delete** button. The selected source record will be re-generated and returned to the initial EI Report status of "Preparing".

8.1.7 View Master List History

This section is used to access all the Master Lists that have been created in the previous years. The Master List History can be accessed by clicking Source Management > Master List History (Figure 7.9).

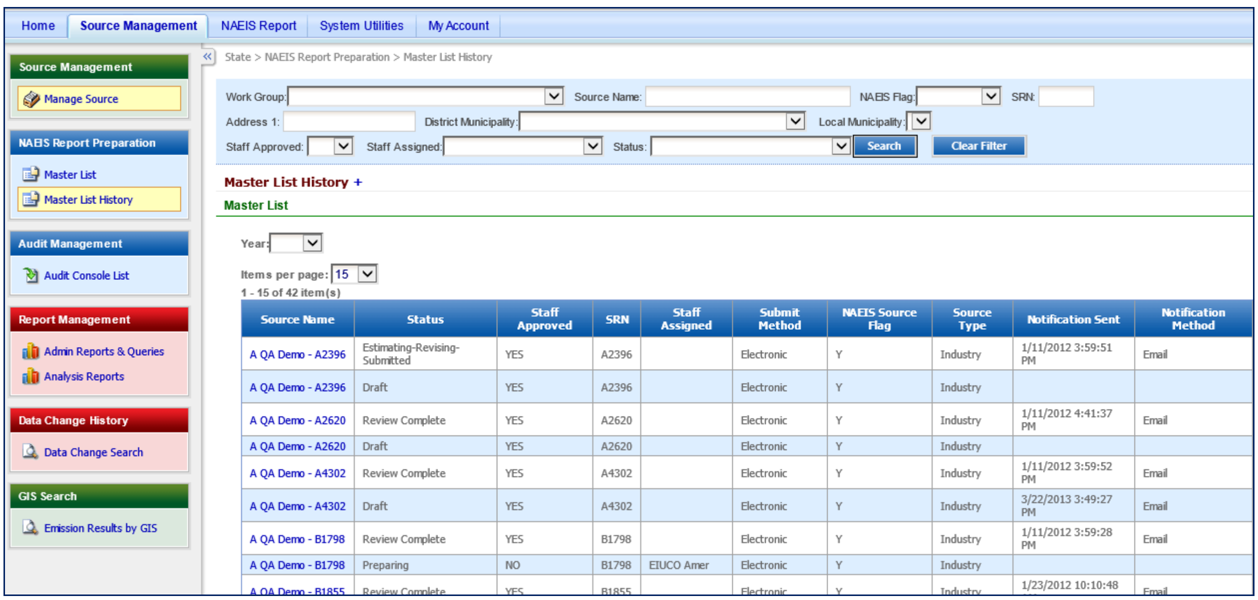


Figure 7.9 Master List History

In the search panel (see Figure 7.8), specify the search criteria and click on the **Search** button to find the expected sources. The search criteria include:

- Work Group (District)
- Source Name
- NAEIS Flag
- SRN
- Address
- District Municipality
- Local Municipality
- Submit Method
- Confirm Received
- Staff Approved

- Staff Assigned
- Status: (This is the processing status of each report)

To reset the user-entered search criteria, click on the **Clear Filter** button. Select a value in the drop-down list of "Year" to see the Master List in a specific year.

8.2 NAEIS EI Report Data Entry

Authorities who have the capacity will be required to submit EI Report for non-industrial sources. These include Residential, Waste, Transport, Agriculture and Fishing sectors. The concept behind Non-Industrial Source reporting is slightly different than that of Industrial Sources. The following diagram outlines a hierarchy of the reporting model:

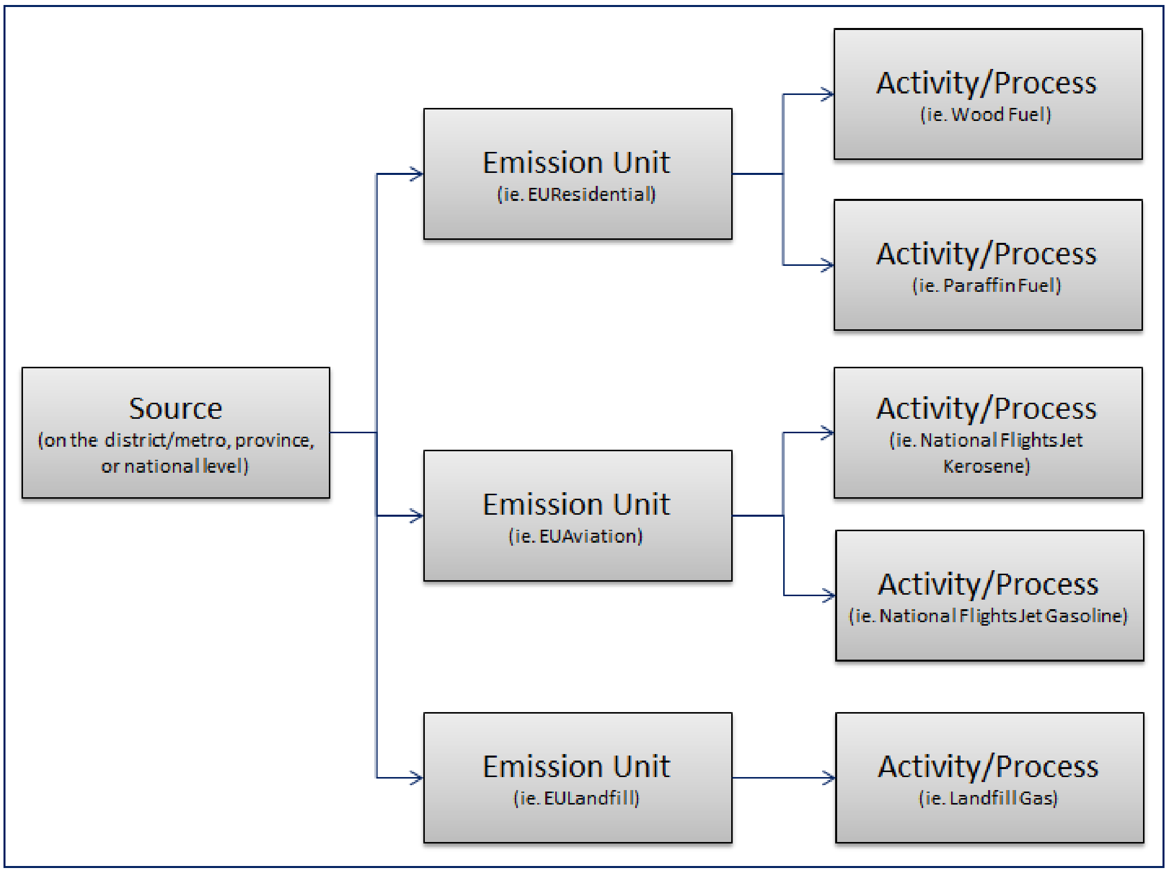


Figure 8.1 Non-Industry Source Process Map

In addition, this chapter describes both industrial and non-industrial sources. In each section within the chapter, there will be a section dedicated to Non-Industry source specific details.

To access the Source Form, click the "NAEIS Report" link at the top menu. Click the "View/Edit" icon for a source, and then click "Source" on the left panel.

8.2.1 Source Form

The Source Form collects basic information about the facility, which includes location and ownership. All sources, both stationary and portable, should complete only one Source Form.

For facilities that submitted a NAEIS report during a previous year, this form should be entirely pre-filled with the most recent previous year data. If information has changed or needs to be updated, edit the

appropriate fields. If all the information is accurate and no editing is necessary, continue to the next form – the Contact Form.

For facilities submitting a NAEIS report for the first time, this form will be partially completed. Follow the instructions for completing the required fields on the Source Form.

8.2.1.1 Source Form Completion Instructions

This form consists of two sections; the Source Identification section and the Owner Information section. Make sure that all the pre-filled information is correct. If all required fields are completed, continue to the Contact Form. If this form needs to be completed or fields need to be edited, follow the instructions below for completing the Source Identification and Owner Information Sections. Required fields are marked with asterisks (*).

8.2.1.2 Source Identification Section

Complete the required fields in this section if information needs to be updated or new information needs to be entered. Follow the steps below.

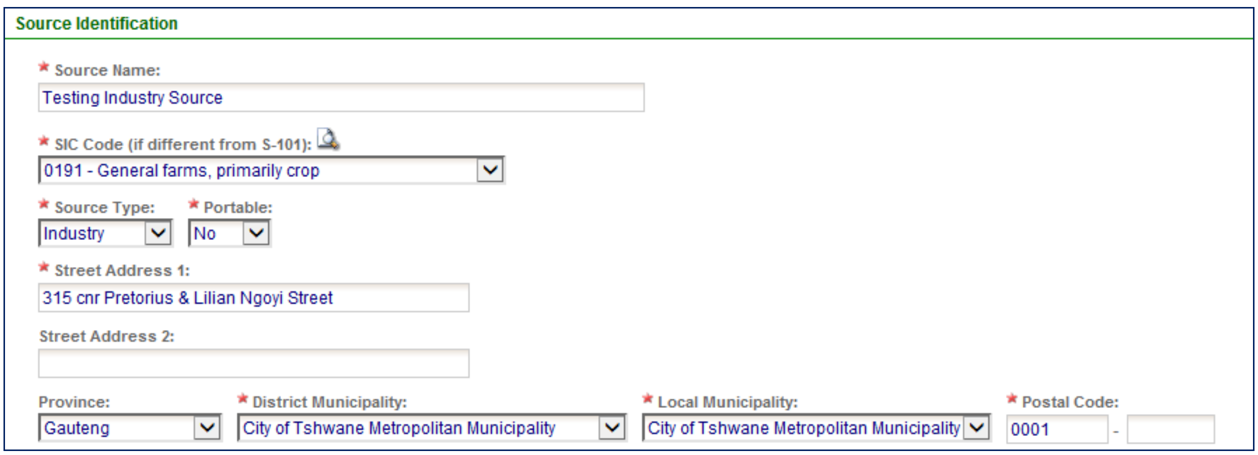


Figure 8.2 Source Identification Section

1. **Source Name**: Enter the name of the source. For portable sources, enter the name of the company that owns the portable source.

2. **SIC Code**: From the drop-down list, select the Source Identification Code (SIC) that best describes the major product produced or service provided by your source (Figure 8.3). Users can elect to click the icon to search and select appropriate SIC Codes.

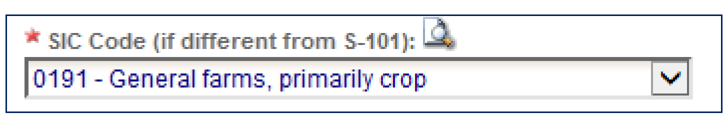


Figure 8.3 SIC Code on Source Form

3. **Portable**: From the drop-down list, select "Yes" if the source is portable (e.g. asphalt batch plant). Select "No" if this is a stationary source.

4. **Source Type**: Select whether this is an Industry or Non-Industry source.

5. **Source Address**

   Street Address 1: This is the street number and name where the source is located. Enter the address of the source where the equipment is located. For portable sources, enter the address of the home or main office.

   District/Metro Municipality: From the drop-down list, select the District/Metro Municipality where the source is located. For portable sources, select the District/Metro Municipality where the home or main office is located.

   Local Municipality: From the drop-down list, select the Local Municipality where the source is located. For portable sources, select the Local Municipality where the home or main office is located.

   Postal Code: Enter the Postal code. The postal code must represent the Local Municipality where the source is located. For portable sources, enter the postal code of the Local Municipality selected in the previous field.

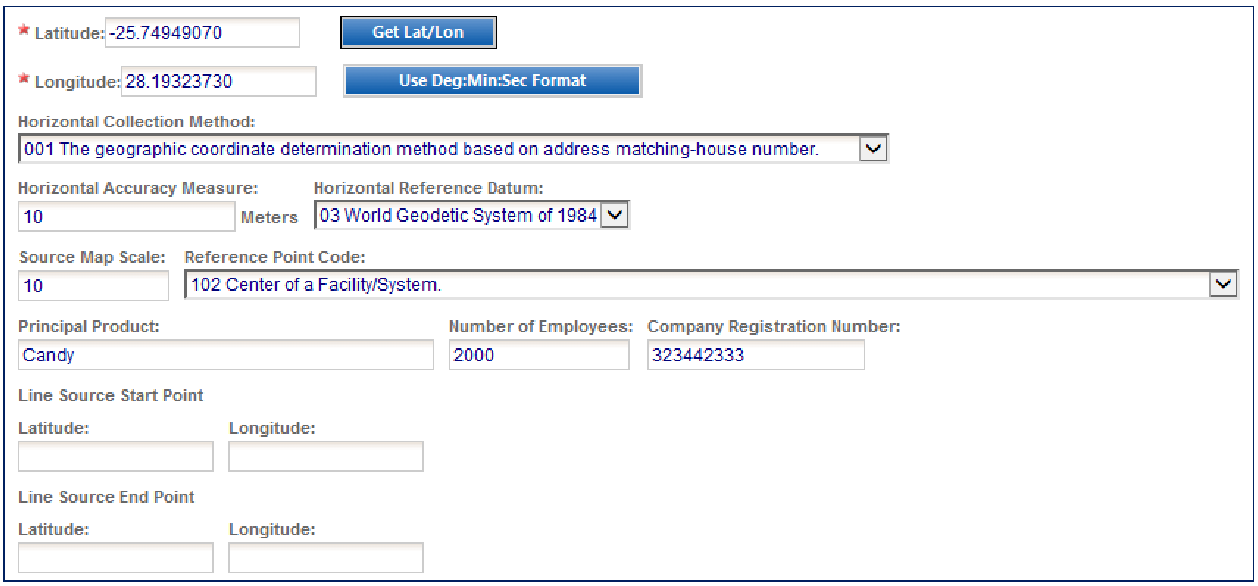


Figure 8.4 Source Identification Section (continued)

6. **Latitude**: Enter the source's latitude in decimal degrees or in Degree:Minute:Second format. Use the **Use Deg:Min:Sec Format** button to toggle the formats. If you do not know the source's latitude/longitude, use the Get Lat/Lon function by clicking the **Get Lat/Lon button**.

7. **Longitude**: Enter the source's Longitude in decimal degrees or in Degree:Minute:Second format. Use the **Use Deg:Min:Sec Format** button to toggle the formats. If you do not know the source's longitude, use the Get Lat/Lon function by clicking the **Get Lat/Lon button**.

When clicking **Get Lat/Long**, the map location will default by pointing to the address supplied in the same source form (Step 4). If no address is provided, the default drop pin will be the center of South Africa. You may choose to drag the drop pin around to get a more accurate latitude/longitude location.

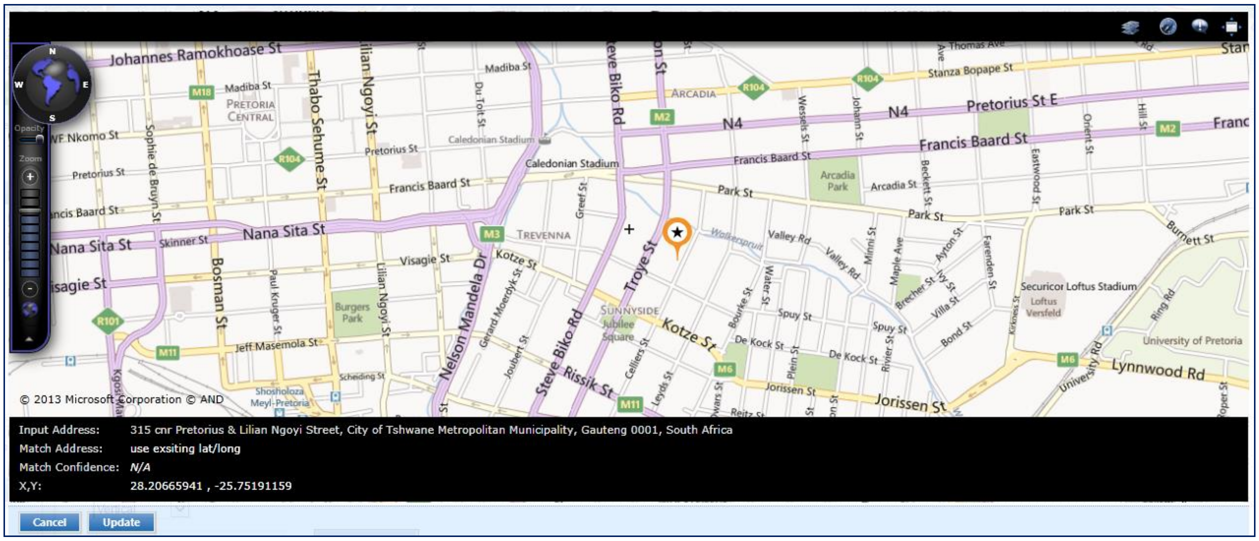


Figure 8.5 Get Latitude/Longitude by Map (Source)

After you are comfortable with the location of the drop pin, click the update button (Figure 8.5). You will then see the latitude/longitude pre-filled on the source form.

8. **Horizontal Collection Method**: From the drop-down list, select the collection method used to determine the latitude and longitude listed.

9. **Source Map Scale**: Enter the scale of the map used. This field is only required if the horizontal collection method code entered is "The geographic coordinate determination method based on interpolation-map."

10. **Horizontal Accuracy**: Enter the accuracy measure of the collection method and report in meters, based on the map or GPS used. If you are using a website, enter 25 meters.

11. **Horizontal Reference Datum**: From the drop-down list, select the datum code used to determine the latitude and longitude.

12. **Reference Point Code**: From the drop-down list, select the point that best describes the location where the latitude and longitude were taken. For instance, if you are using horizontal collection method code "The geographic coordinate determination method based on address matching-house number", reference point code "Entrance of a facility or station" may be used. If you are using a GPS, choose the point closest to where you were standing when reading the GPS, such as code "Center of a facility or station."

13. **Number of Employees**: Enter the average number of people employed at this location.

14. **Principal Product**: Enter the principal product produced at the source (e.g., "Platinum").

15. **Company Registration Number**: Enter the source's "Company Registration Number" that is tied to your Section 21 Obligations.

8.2.1.3 Owner Information Section

Complete the required fields in this section if information needs to be updated or new information needs to be entered.

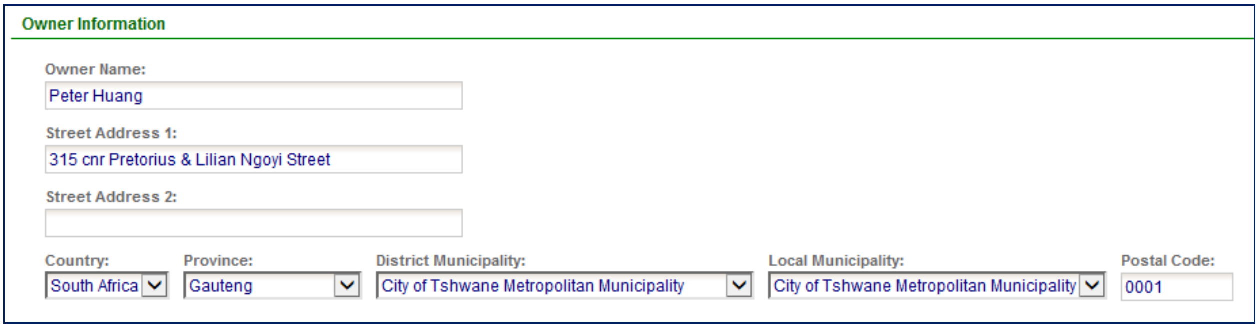


Figure 8.6 Owner Information Section

15. **Owner Name**: Enter the name of the owner of the source or the parent/holding company.

16. **Contact Address**: If the owner's address is different than the source address, complete these fields. Fill out the name and address exactly as it should appear on all correspondence.

8.2.1.4 Non-Industrial Source Specific – Source Form

There are no specific fields or logic for non-industrial sources on the Source Form. The only field to pay attention to is the Source Type in step 4.

8.2.2 Contact Form

The Contact Form collects information for the emission inventory contact person (primary and secondary). The emission inventory contact person is the person who the Authorities will call if they have questions about the submitted NAEIS information. In addition, the annual mailing in January will be sent to the emission inventory contact person, who is also the Accounting Officer. Information for a secondary contact person may be provided. It will be used by Authorities in case the primary contact person may not be available.

For facilities that submitted a NAEIS report in a previous year, this form should be entirely pre-filled. If information has changed or needs to be updated, edit the appropriate fields. If all the information is accurate and no editing is necessary, continue to the Stack Form.

8.2.2.1 Contact Form Completion Instructions

This form consists of two sections: one for the primary contact and one for the secondary contact. Make sure that all the pre-filled information is correct. If all required fields are completed, continue to the Stack form. If this form needs to be completed or fields need to be edited, follow the instructions below for completing the Emission Inventory Contact Form.

8.2.2.2 Emission Inventory Contact Section

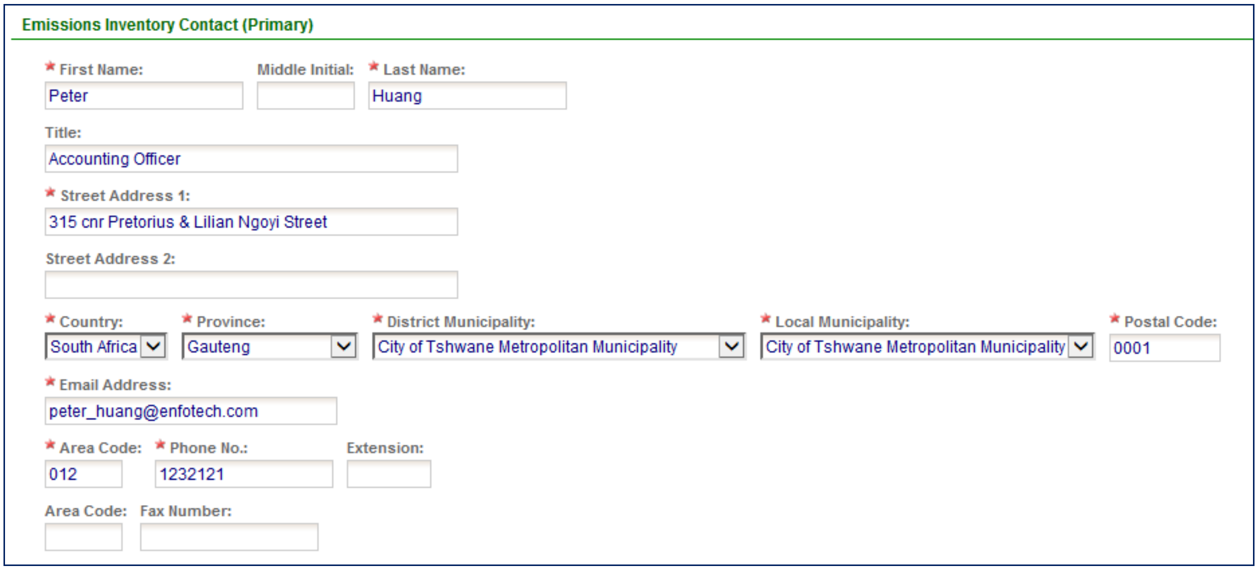


Figure 8.7 Primary Emission Inventory Contact Section

If existing information needs to be updated or new information needs to be entered, complete the required fields in this section. Follow the steps below.

1. **Primary Contact Information**: A source contact (the Accounting Officer) must be identified. The address entered is where future NAEIS correspondence will be sent. Enter the name, mailing address, telephone number (including extension and fax number), and e-mail address.

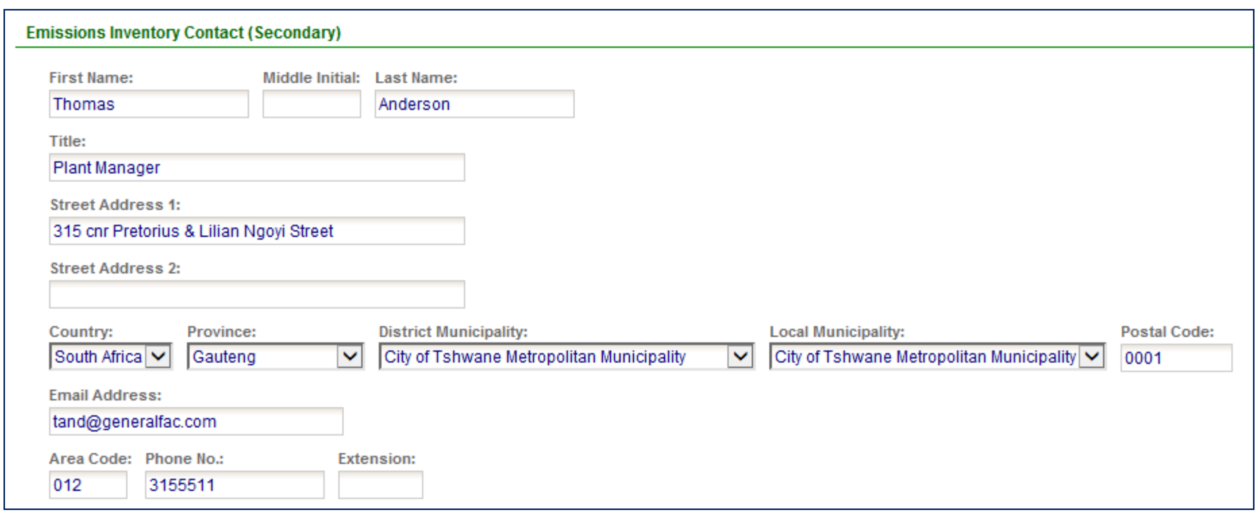


Figure 8.8 Secondary Emission Inventory Contact Section

2. **Secondary Contact Information**: A secondary contact may or may not be identified. This person must be a source contact. This address is where future NAEIS correspondence will be sent when the primary contact cannot be reached. Enter the name, mailing address, telephone number (including extension and fax number), and e-mail address.

8.2.2.3 Non-Industrial Source Specific – Contact Form

There are no specific fields or logic for non-industrial sources on the Contact Form. Make sure the Primary EI Contact is the Province or District AQO in charge of the reporting area source.

8.2.3 Stack Form

The Stack Form collects information about stacks that are connected to emission units listed on the Emission Unit Form. If an existing stack that was entered during a previous year becomes decommissioned, it can be removed from NAEIS by clicking the "Delete" icon of this stack (see instructions below). However, this means that only the stack form does not have to be completed – all of the other NAEIS forms are still required. The emissions coming from the emission unit that was once linked to the stack must still be reported on the Emission form because the emissions are reported at the emission unit level, not at the stack level.

8.2.3.1 Stack Form Relationship to Other Forms

The stacks created in this form will be displayed as a selection in the drop-down list in the Emission Unit Stack(s) Section on the emission unit form.

8.2.3.2 Stack Form Completion Instructions

This form consists of one section: the Stack Identification section. If the stack was added during a previous year, this information will be pre-filled. If your source does not contain any stacks, you do not need to complete this form and may proceed to the Emission Unit form. If any existing/pre-filled information about any stack is incorrect, enter the correct information in the Stack Identification Section. Following is an explanation of each section of the Stack form, as well as step-by-step instructions on how to complete the required fields.

8.2.3.3 Stack Identification Section

Click the stack form option on the left panel to display the stack list web page (Figure 8.9). This page lists all the stacks in this source. Click the "View/Edit" icon to edit an existing stack, the "Delete" icon to delete an existing stack, or the "Add New Stack" to add a new stack for this source.

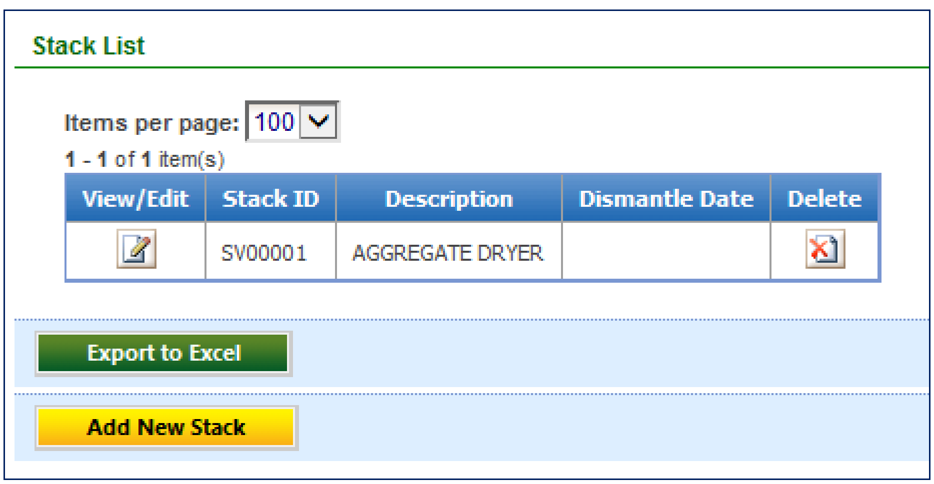


Figure 8.9 Stack List

If you choose to edit an existing stack or add a new stack, the stack detail page will display (Figure 8.10).

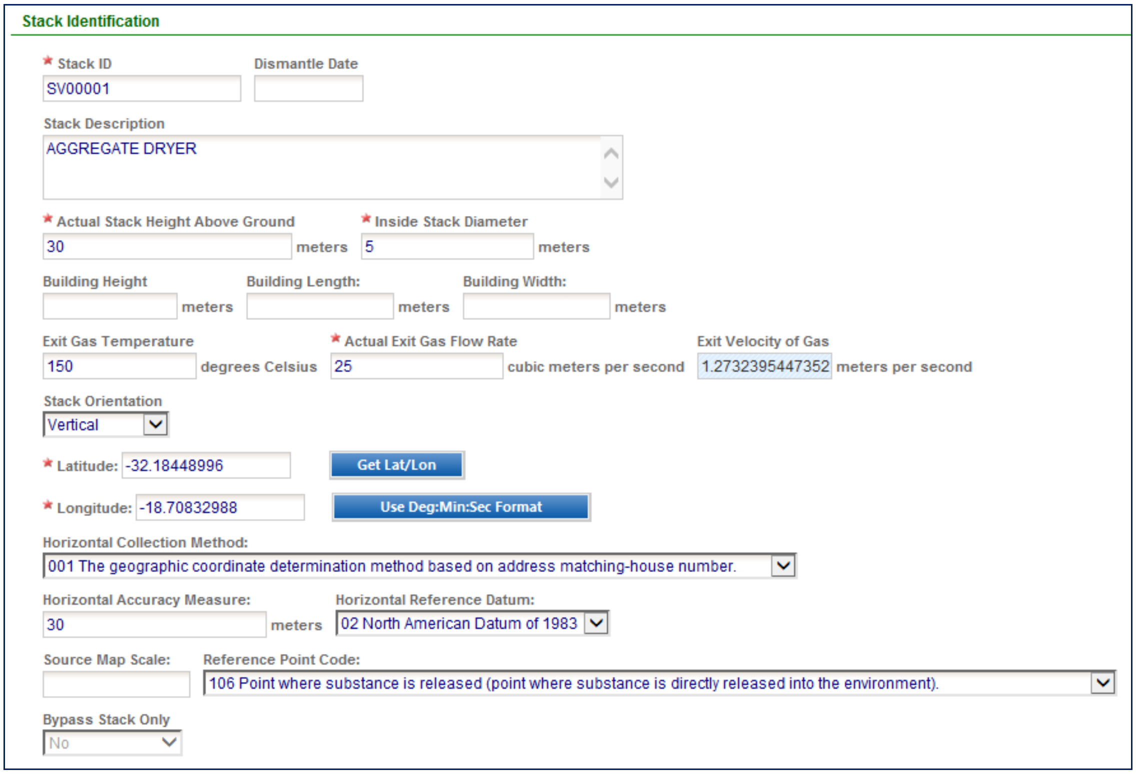


Figure 8.10 Section of Stack Identification

Complete the fields in this section for new stacks or to make changes to old information. Follow the steps below.

1. **Stack ID**: This is the Stack ID. Enter a unique ID for each stack that must be reported. Stack IDs begin with an "SV" prefix plus any combination of up to 14 letters, numbers, or keyboard characters. Spaces are not allowed within the ID. Stack IDs may have already been established in a Section 21 Permit. If so, be sure to use the ID that is in the permit. If a stack ID does not already exist, create an ID that is easy to associate with the stack that it represents (e.g. SVSTACK#1, SVBOILER#3).

2. **Dismantle Date**: If the stack was dismantled or rendered permanently inoperable during the reporting year, enter the date that this occurred. Although the stack has been dismantled, the following steps must still be completed. If a dismantle date is entered, do not delete this stack from the stack list because a dismantled stack may still require emissions reporting for this year. If this is a portable source, the dismantle date should be left blank.

3. **Stack Description**: Provide a brief description of the stack.

4. **Actual Stack Height Above Ground**: Enter the height of the stack in meters from the ground up to the discharge point.

5. **Building Height:** Enter the height of the building in which the stack resides.

6. **Building Length:** Enter the length of the building in which the stack resides.

7. **Building Width:** Enter the width of the building in which the stack resides.

8. **Inside Stack Diameter**: If the stack is circular, enter the inside top stack diameter. If the stack is rectangular, convert the area inside of the stack to a circular diameter using the following procedure:

   (a) Obtain the length and width in meters.

   (b) Calculate the area by multiplying the length times the width.

   (c) Divide the area by 3.14.

   (d) Take the square root of the value from step (c) to obtain the radius.

   (e) Calculate the diameter by multiplying the radius (from step [d]) by 2.

   (f) Enter the diameter (from step [e]) in item 5.

9. **Exit Gas Temperature**: Enter the stack exit gas temperature in degrees Celsius.

10. **Actual Exit Gas Flow Rate**: Enter the stack exhaust volume in actual cubic meters per second, at actual operating load and temperature.

11. **Stack Orientation**: From the drop-down list, select the most appropriate orientation.

12. For steps 15 through 19, smaller sources can use the same coordinate information that was entered on the source form. Larger sources should enter the specific coordinates for each stack. These fields are not required for portable sources.

13. **Latitude**: Enter the source's latitude in decimal degrees or in Degree:Minute:Second format. Use the "Use Deg:Min:Sec Format" button to toggle the formats. If you do not know the facility's latitude, use the "Get Lat/Lon" function by clicking the "Get Lat/Lon" button in the source form.

14. **Longitude**: Enter the source's Longitude in decimal degrees or in Degree:Minute:Second format. Use the "Use Deg:Min:Sec Format" button to toggle the formats. If you do not know the facility's longitude, use the "Get Lat/Lon" function by clicking "Get Lat/Lon" button in the source form.

When clicking **Get Lat/Long**, the map location will default by pointing to the address supplied in the source form in Section 8.2. If no address is provided, the default drop pin will be the center of South Africa. You may choose to drag the drop pin around to get a more accurate latitude/longitude location.

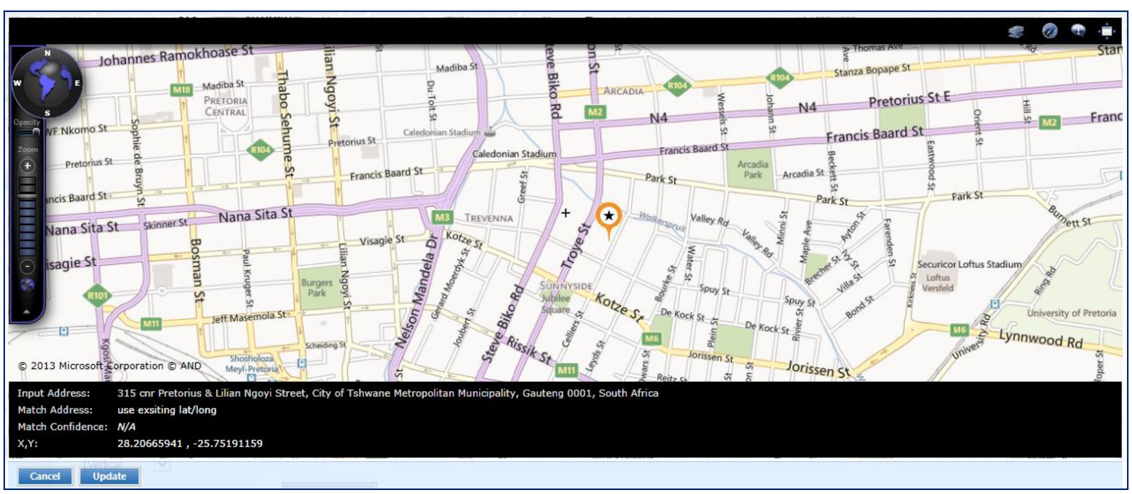


Figure 8.11 Get Latitude/Longitude by Map (Stack)

After you are comfortable with the location of the drop pin, click the update button (Figure 8.11). You will then see the latitude/longitude pre-filled on the source form.

15. **Horizontal Collection Method**: From the drop-down list, select the collection method used to determine the latitude and longitude listed.

16. **Source Map Scale**: Enter the scale of the map used. This field is only required if the horizontal collection method code entered is “The geographic coordinate determination method based on interpolation-map.”

17. **Horizontal Accuracy**: Enter the accuracy measure of the collection method and report in meters, based on the map or GPS used. If you are using a website, enter 25 meters.

18. **Horizontal Reference Datum**: From the drop-down list, select the datum code used to determine the latitude and longitude.

19. **Reference Point Code**: From the drop-down list, select the point that best describes the location where the latitude and longitude were taken. For instance, if using horizontal collection method code “The geographic coordinate determination method based on address matching-house number” reference point code “Point where substance is released” may be used. If using a GPS, choose the point closest to where you were standing when reading the GPS.

20. **Bypass Stack Only**: From the drop-down list, select “Yes” if this stack is used only when emissions are bypassing the emission control equipment. Otherwise, select “No.” “No” is the default selection.

21. **If Yes, Main Stack ID**: If “Yes” was selected for Step 16, select the Stack ID of the stack that this vent bypasses. Otherwise, leave this field blank.

8.2.3.4 Adding a Stack

Follow the steps below to add a stack to your NAEIS report.

1. Click "Add New Stack" in the stack list (Figure 8.9).
2. A new stack form will be displayed for you to complete (Figure 8.10).
3. Follow Steps 1 – 21 in the Form Completion Instructions.

8.2.3.5 Deleting a Stack

If you have stack information that you would like to delete, follow the steps below.

1. In the stack list, click the "Delete" icon to delete a stack.
2. If this stack is newly added this year, the stack will be directly deleted. If this stack has been reported in a previous reporting year, follow the instructions in the pop-up window to delete this stack.

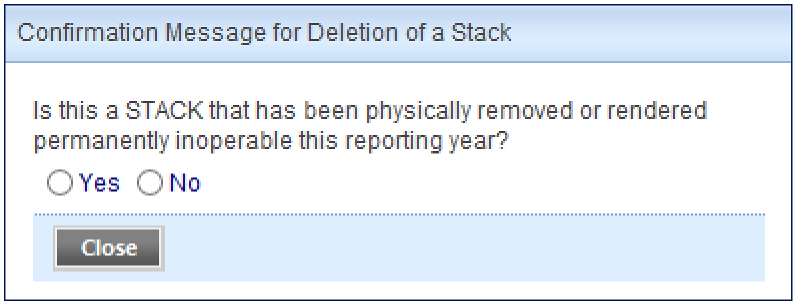


Figure 8.12 Pop-up Window 1 when deleting a stack

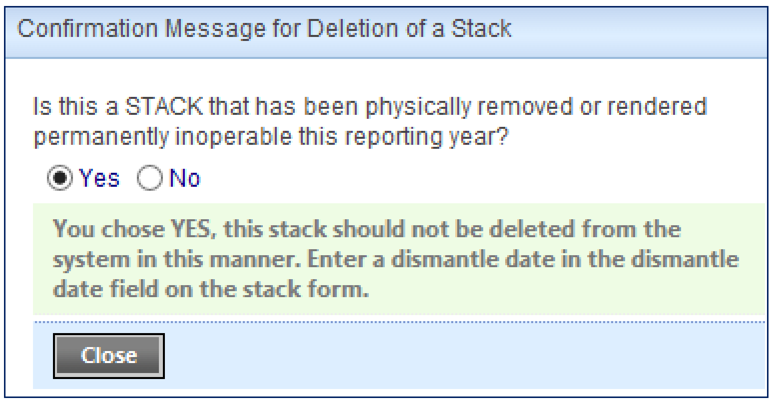


Figure 8.13 Pop-up Window 2 when deleting a stack

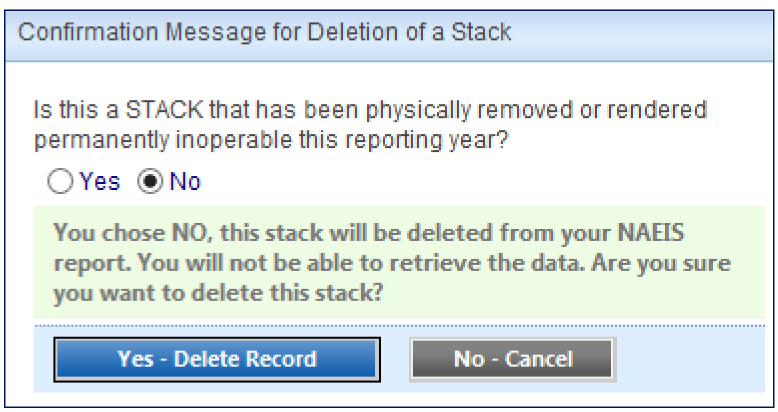


Figure 8.14 Pop-up Window 3 when deleting a stack

8.2.3.6 Non-Industrial Source Specific – Stack Form

Because there is no such concept of a stack for non-industrial sources, this form has been omitted from the EI Report.

8.2.4 Emission Unit Form

The Emission Unit Form identifies and describes a facility's emission units. Emission units that were entered during previous reporting periods will be pre-filled. If you have an emission unit at your facility that is not already included on the emission unit form, it may need to be added. Use the guidelines on the following pages to help you determine which emission units at your facility need to be reported.

8.2.4.1 Emission Unit Form Relationship to Other Forms

For each emission unit entered on the emission unit Form, an activity form is automatically generated. In addition, the user may link stack IDs (that were created on the stack form) to the emission unit in the Emission Unit Stack(s) Section.

8.2.4.2 Emission Unit Form Completion Instructions

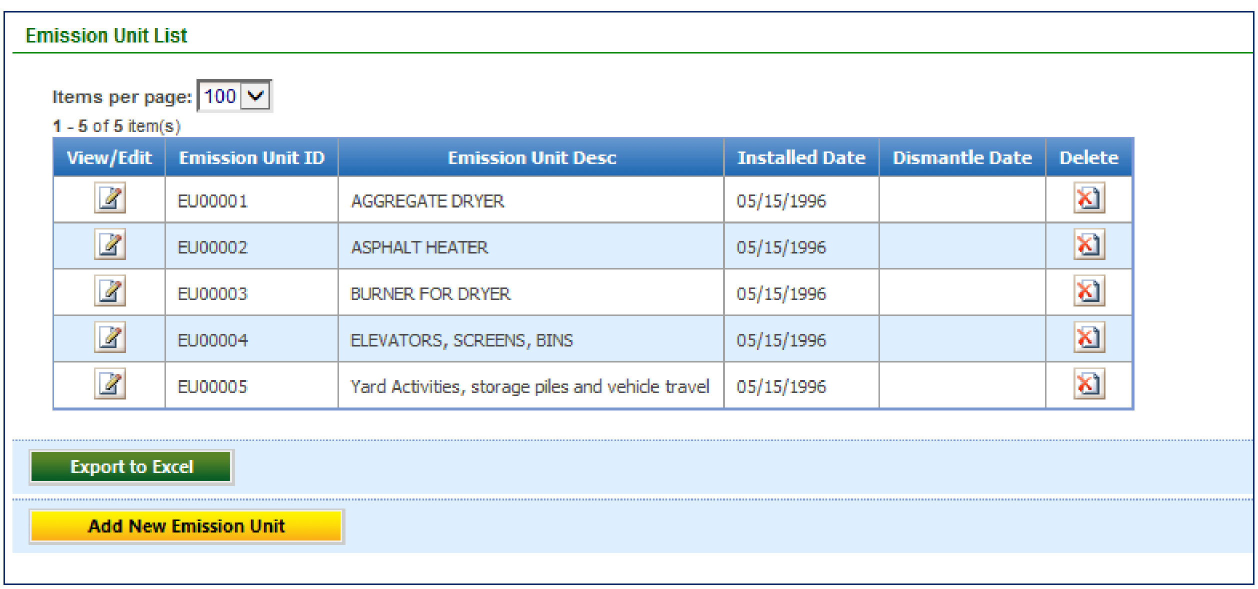
The Emission Unit form consists of six sections:

- Emission Unit List section,
- Emission Unit Identification section,
- Capacity Information section,
- Permit Applicability Section,
- Control Device(s) section,
- Emission Unit Stack(s) section.

If an emission unit was added to your facility during the reporting period and it must be reported, add it to the emission unit form by clicking the "Add New Emission Unit" button.

For emission units that were added in previous years, the information will already be pre-filled. If any information has changed or needs to be updated, edit the appropriate fields. If no emission units were added during the reporting period and if all the information that is pre-filled is still accurate, you do not have to complete this form and you may proceed to the reporting group or activity form (Section 8.5 and 8.6).

Following is an explanation of each section of the emission unit form, as well as step-by-step instructions on how to complete the required fields.


Emission Unit List

Items per page: 100

1 - 5 of 5 item(s)

View/Edit	Emission Unit ID	Emission Unit Desc	Installed Date	Dismantle Date	Delete
	EU00001	AGGREGATE DRYER	05/15/1996		
	EU00002	ASPHALT HEATER	05/15/1996		
	EU00003	BURNER FOR DRYER	05/15/1996		
	EU00004	ELEVATORS, SCREENS, BINS	05/15/1996		
	EU00005	Yard Activities, storage piles and vehicle travel	05/15/1996		

Export to Excel

Add New Emission Unit

Figure 8.15 Emission Unit List

8.2.4.3 Emission Unit List Section

This section lists all the reported emission units in this source. Click the "View/Edit" icon to edit an emission unit, the "Delete" icon to delete an emission unit, or the "Add New Emission Unit" button to add a new emission unit.

Click the "View/Edit" icon to access other sections of this emission unit form.

8.2.4.4 Emission Unit Identification Section

Complete the fields in this section for new emission units or to make changes to the previous year's report. Follow the steps below.

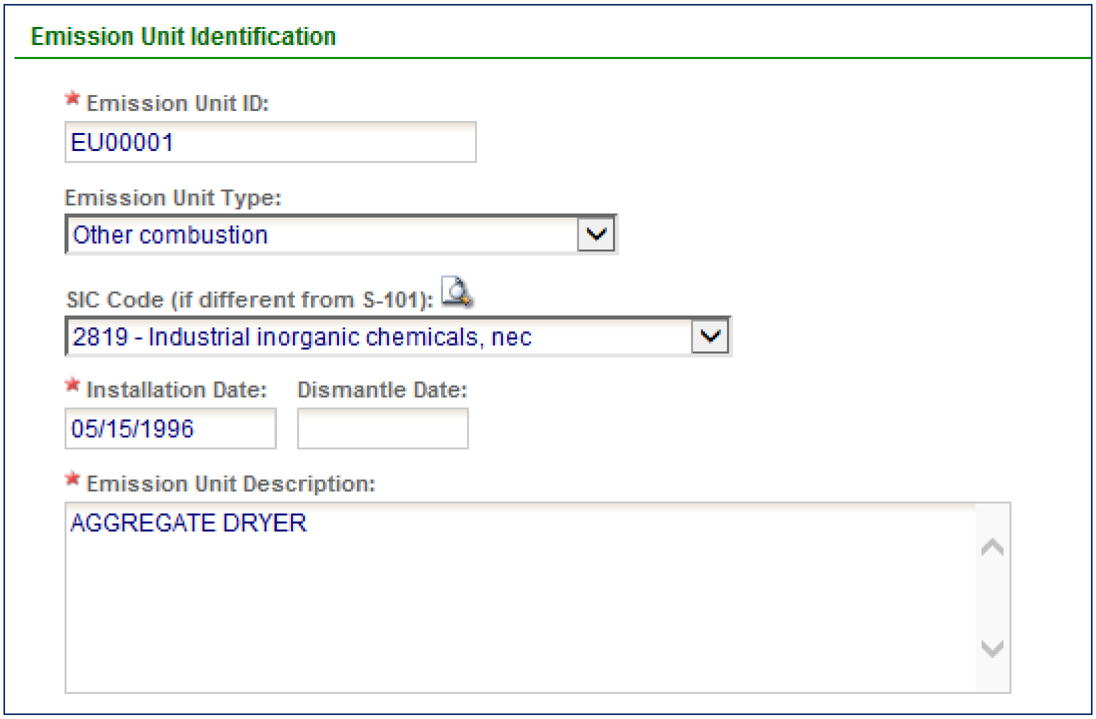


Figure 8.16 Emission Unit Identification Section

1. **Emission Unit ID**: Enter a unique ID for this emission unit. Emission unit IDs must begin with an "EU" prefix plus any combination of up to 14 letters, numbers, or keyboard characters. Spaces are not allowed within the ID. Make the emission unit ID specific and easy to associate with the emission unit(s) it represents (e.g. EUPAINTBOOTHS, EUBOILER#2).

2. **SIC Code**: From the drop-down list, select the Source Identification Code (SIC) that best describes the major product produced or service provided by your source. Users can elect to click the icon to search and select appropriate SIC Codes.

3. **Installation Date**: Enter the date that the emission unit was first installed using the date format provided (MM/DD/YYYY).

4. **Dismantle Date**: If the emission unit was dismantled or rendered permanently inoperable during the reporting year, enter the date that this occurred. Although the emission unit has been dismantled, the remaining fields must still be completed. If this is a portable source, the dismantle date should be left blank. Do not complete this field if it is not applicable to the emission unit.

5. **Emission Unit Description**: Enter a brief narrative description of the emission unit. Make sure that this description is specific and will help to identify the emission unit, especially if there are several emission units that are alike.

8.2.4.5 Capacity Information Section

Complete the fields in this section for new emission units or to make changes to the previous year's report. Follow the steps below.

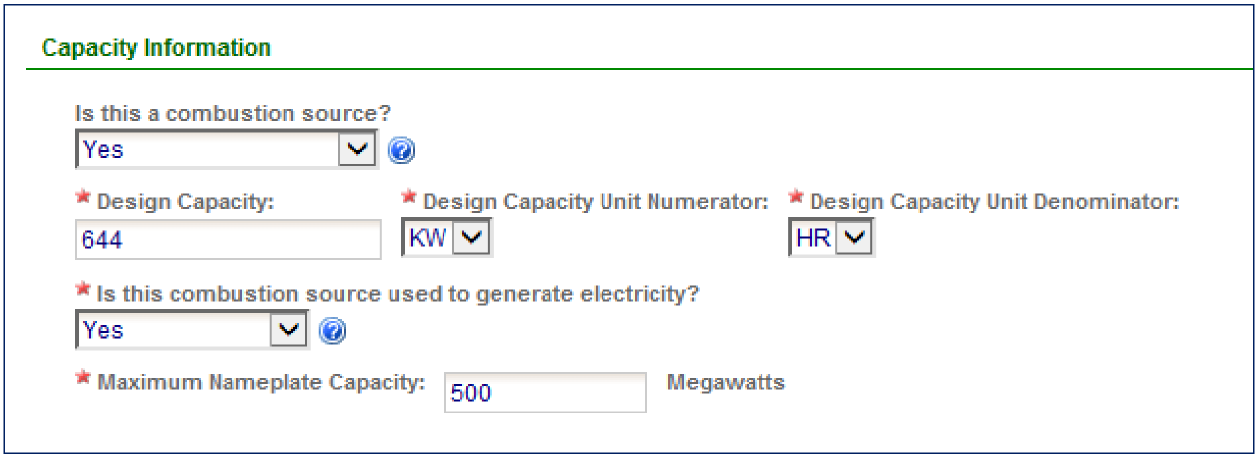


Figure 8.17 Capacity Information Section

6. **Is this a Combustion Source**: If the emission unit is a combustion source, choose Yes from the drop-down list. If "No" is chosen, please ignore steps 7-10.

7. **Design Capacity**: Only complete this field if the emission unit is a combustion source. Enter the design capacity.

8. **Design Capacity Numerator and Denominator**: Only complete these fields if you completed the Design Capacity field in Step-7

    - Design Capacity Unit Numerator: Choose the appropriate code from the Unit Code drop-down list.
    - Design Capacity Unit Denominator: Choose the appropriate code from the Unit Code drop-down list.

9. **Is this combustion source used to generate electricity**: Choose "Yes" if this emission unit is used to generate electricity. If "No" is chosen, please ignore step 10.

10. **Maximum Nameplate Capacity**: Only complete this field if this emission unit is used to generate electricity. Report the electric generator's rated design capacity at 100% (maximum) operation in megawatts.

8.2.4.6 Control Device Section

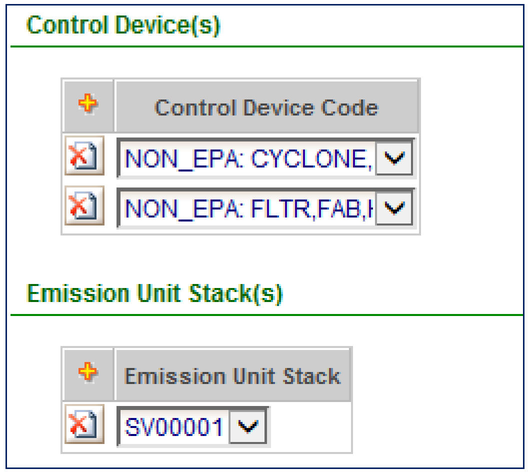


Figure 8.18 Control Device and Emission Unit Stack Section

11. **Control Device Code**: If there is a control device associated with the emission unit, select the most appropriate control device from the drop-down list.

    If there is more than one control device, additional control device codes may be added. Follow the steps below to add a control device.

    (a) After the first control device code has been selected, click the "+" icon in the grid view.
    (b) Another drop-down field will appear. Select another control device.

8.2.4.7 Emission Unit Stack Section

12. **Stack ID**: Click on this field and a drop-down list will appear containing the Stack ID's that were created on the stack form. If a stack that was reported on the stack form is associated with the emission unit, select the appropriate Stack ID. Every Stack ID that was created on the stack form must be listed on at least one emission unit form.

    If more than one reported stack is associated with the emission unit, additional Stack IDs may be added. Follow the steps below to enter additional Stack IDs.

    (a) After the first Stack ID has been selected, Click the "+" icon in the grid view.
    (b) Another field will appear. Select another Stack ID.

8.2.4.8 Adding an Emission Unit

Follow the steps below to add an emission unit to your NAEIS report.

1. Click "Add New Emission Unit" in the emission unit list (Figure 8.15).
2. A new emission form will be displayed for you to complete (Figure 8.16 – 5.18).
3. Follow Steps 1 – 12 in the Form Completion Instructions.

8.2.4.9 Deleting an Emission Unit

If you want to delete emission unit information, follow the steps below.

1. In the emission list (Figure 8.15), click the "Delete" icon to delete an emission unit.
2. If this emission unit was newly added this year, it will be directly deleted. If this emission unit has been reported in a previous reporting year, follow the instructions in the pop-up window to delete this emission unit.

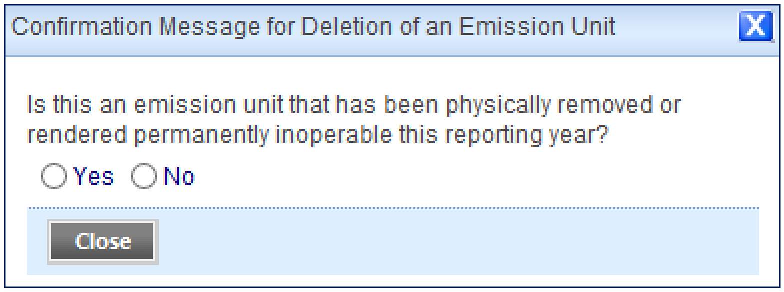


Figure 8.19 Pop-up Window 1 when deleting an emission unit

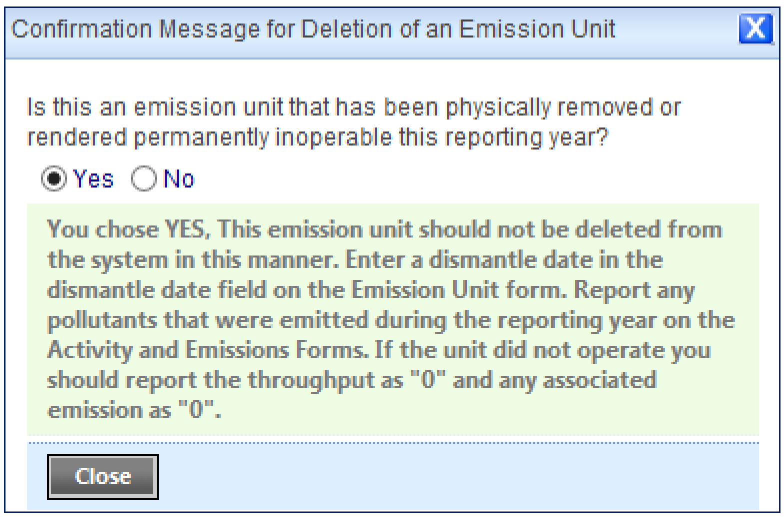


Figure 8.20 Pop-up Window 2 when deleting an emission unit

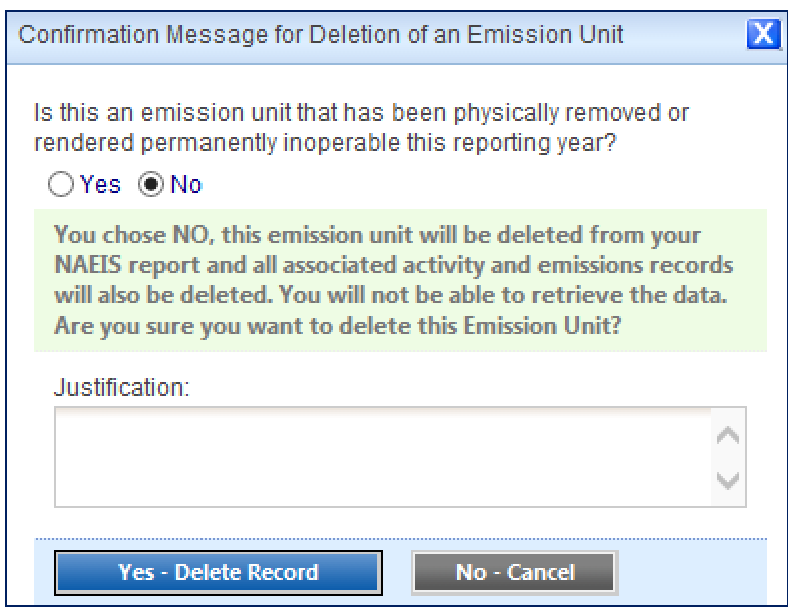


Figure 8.21 Pop-up Window 3 when deleting an emission unit

8.2.4.10 Non-Industrial Source Specific – Stack Form

For Non-Industrial Source Emission Units, the following will be omitted from the form:

1. **Control Device Section** – The control devices currently in NAEIS pertain only to Industry Emission units only. Hence, no control devices need to be linked to non-industrial emission units.
2. **Stack Section** – Because there is no concept of stack in Non-Industrial Sources, there will be no need to link any emission units to any stacks.

The following are data fields/features specific to Non-Industrial Source Emission Units:

1. Get Lat/Lon – There is a section for users to provide the Latitude/Longitude for the emission unit. In addition, users can specify the radius to make an area source.

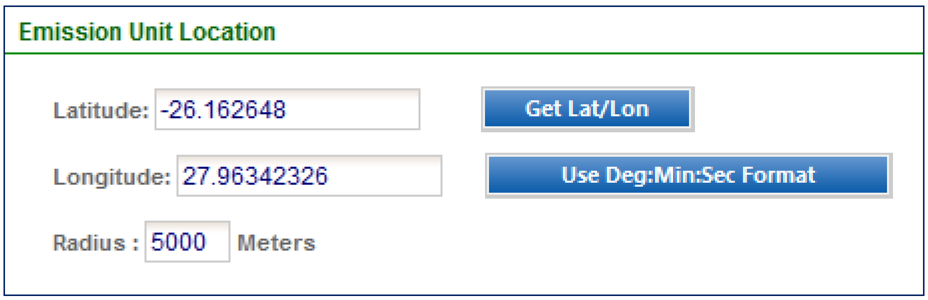


Figure 8.22 Latitude/Longitude (Emission Unit)

By clicking the **Get Lat/Lon** button, users can specify the exact latitude and radius of the area source. The map location will default by pointing to the address supplied in the source form in Section 8.2. If no address is provided, the default drop pin will be the center of South Africa. You may choose to drag the drop pin around to get a more accurate latitude/longitude location. In addition, type in the length of the area radius, then click **Apply Radius** to see the area covered for the emission unit.

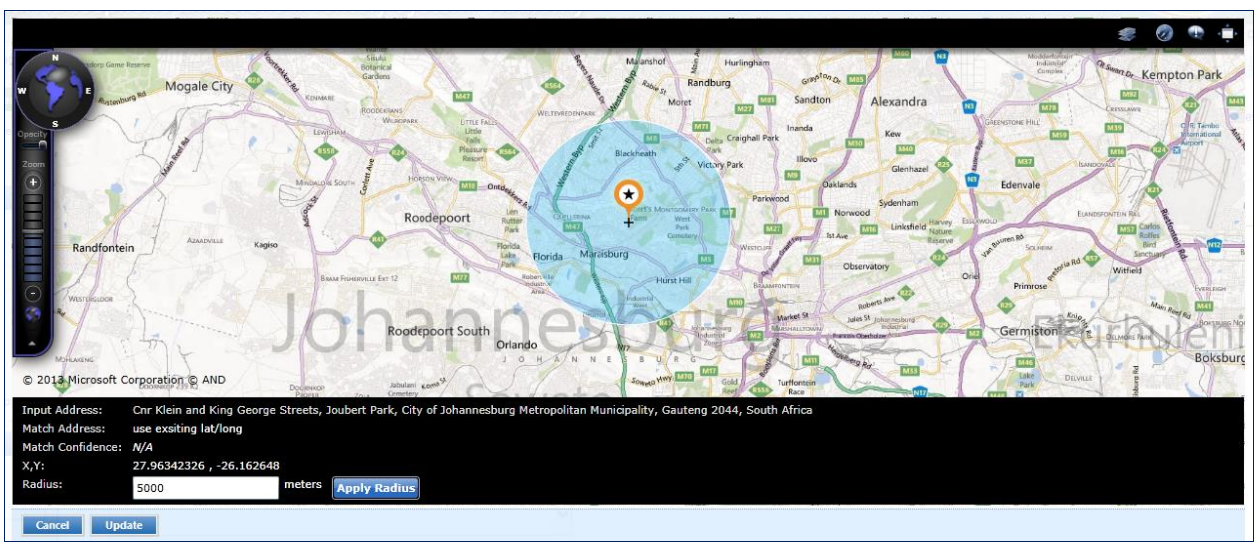


Figure 8.23 Get Latitude/Longitude by Map (Emission Unit)

8.2.5 Reporting Group Form

The Reporting Group Form is used to combine emission units into reporting groups to simplify emission calculations. THIS IS AN OPTIONAL FORM – facilities are not required to create reporting groups. However, for some facilities, reporting emissions at the reporting group level may be easier than at the emission unit

level if multiple emission units have common emission limits and record keeping requirements. If this form is used, the Activity form and the Emissions form must be completed at the reporting group level.

8.2.5.1 Reporting Group Form Completion Instructions

If a reporting group was created during a previous reporting year, the fields in this form should be pre-filled. Check to ensure that all the information is accurate. If any information needs to be changed, follow the instructions below and edit the appropriate fields. If you would like to add or delete a reporting group, see the instructions below.

8.2.5.2 Reporting Group List

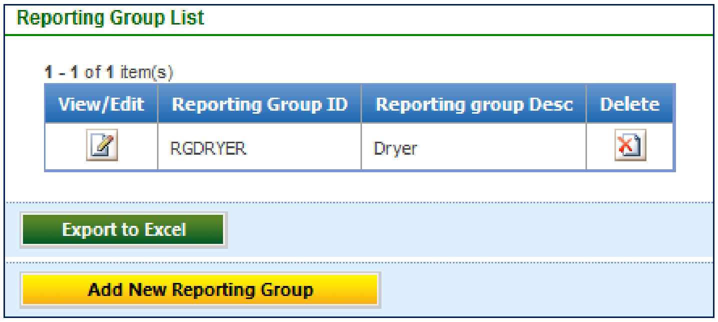


Figure 8.24 Reporting Group List

This section lists all the reporting groups in this source. Click the "View/Edit" icon to edit a reporting group, the "Delete" icon to delete a reporting group, or the "Add New Reporting Group" button to add a new reporting group.

Click the "View/Edit" icon to access other sections of this reporting group form.

8.2.5.3 Reporting Group Identification

Complete the fields in this section for new reporting groups or to make changes to the previous year's report. Follow the steps below.

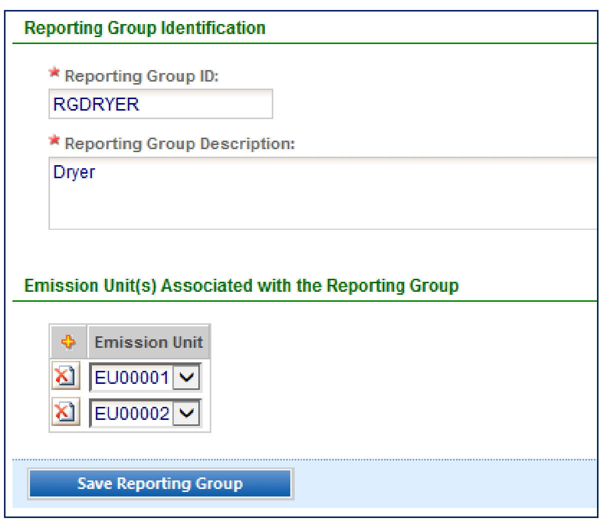


Figure 8.25 Reporting Group Form

1. **Reporting Group ID**: Enter a unique ID for this reporting group. Reporting Group IDs must begin with an "RG" prefix plus any combination of up to 14 letters, numbers, or keyboard characters. Spaces are not allowed within the ID. Make the reporting group ID specific and easy to associate with the reporting group it represents (e.g. RGBOILERS).

2. **Reporting Group Description**: Provide a brief narrative description of the reporting group.

8.2.5.4 Reporting Group Emission Units Section

3. **Emission Unit ID**: To add an emission unit to this list, click the "+" sign in the grid view, the select the emission unit ID to be included in this reporting group. Repeat this step to add more emission units. Click the "x" sign to delete an emission unit from this reporting group.

8.2.5.5 Non-Industrial Source Specific – Reporting Group Form

Because there is no such concept of a reporting group for non-industrial sources, this form has been omitted from the EI Report.

8.2.6 Activity and Emission Form

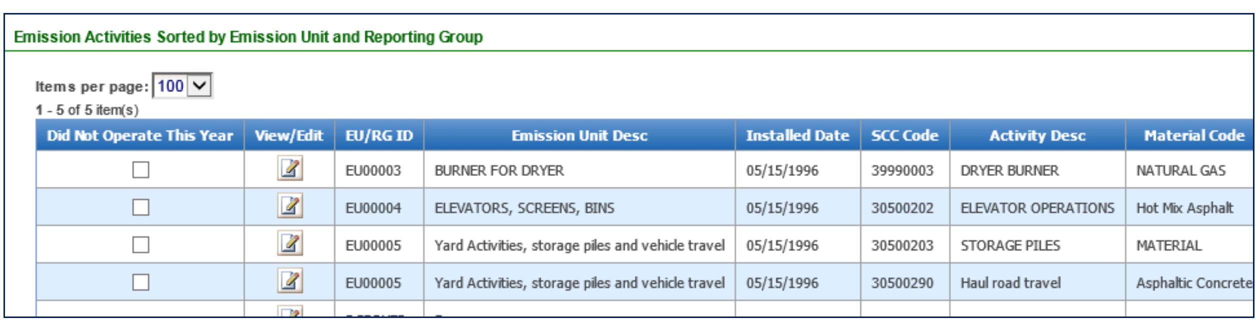
The Activity Form describes operating schedules and material information for an emission unit or reporting group. One activity form must be completed for each reporting group and each emission unit that is not part of a reporting group.

8.2.6.1 Activity Form Completion Instructions

The activity form consists of three sections: the Emission Unit and Reporting Group List section, the Activity Information section, and the Material Information section. For portable sources, the form also includes a section of Portable Material Usage Schedule.

All activity information that was entered for emission units in previous years will be pre-filled, except the material throughput information. This is a required field that must be updated every reporting year. If any other information needs to be updated, edit the proper fields. If no other information needs to be added and if all the information that is pre-filled is still accurate, all you have to do is enter the proper material throughput information for each activity and move on to the emission form (discussed in later sections in this page). Following is an explanation of each section of the activity form, as well as step-by-step instructions on how to complete the required fields.

8.2.6.2 Emission Unit and Reporting Group List Section



Emission Activities Sorted by Emission Unit and Reporting Group

Items per page: 100

1 - 5 of 5 item(s)

Did Not Operate This Year	View/Edit	EU/RG ID	Emission Unit Desc	Installed Date	SCC Code	Activity Desc	Material Code
☐		EU00003	BURNER FOR DRYER	05/15/1996	39990003	DRYER BURNER	NATURAL GAS
☐		EU00004	ELEVATORS, SCREENS, BINS	05/15/1996	30500202	ELEVATOR OPERATIONS	Hot Mix Asphalt
☐		EU00005	Yard Activities, storage piles and vehicle travel	05/15/1996	30500203	STORAGE PILES	MATERIAL
☐		EU00005	Yard Activities, storage piles and vehicle travel	05/15/1996	30500290	Haul road travel	Asphaltic Concrete

Figure 8.26 Activity List

This section lists all the activities in this source. Click the "View/Edit" icon to edit an activity, or the "Delete" icon to delete an activity.

If the SCC Code for an emission unit or a report group is blank, there is currently no activity in this emission unit or reporting group. To add an activity for this emission unit or reporting group, click the "View/Edit" icon to enter Activity and Emission Details (Figure 8.27a) and then click the "Add New Activity" button to add an activity.

Emission Calculation: Click "Calculate Emissions" in this view to calculate emissions for all emission units and reporting groups in this source.

8.2.6.3 Activity Information Section

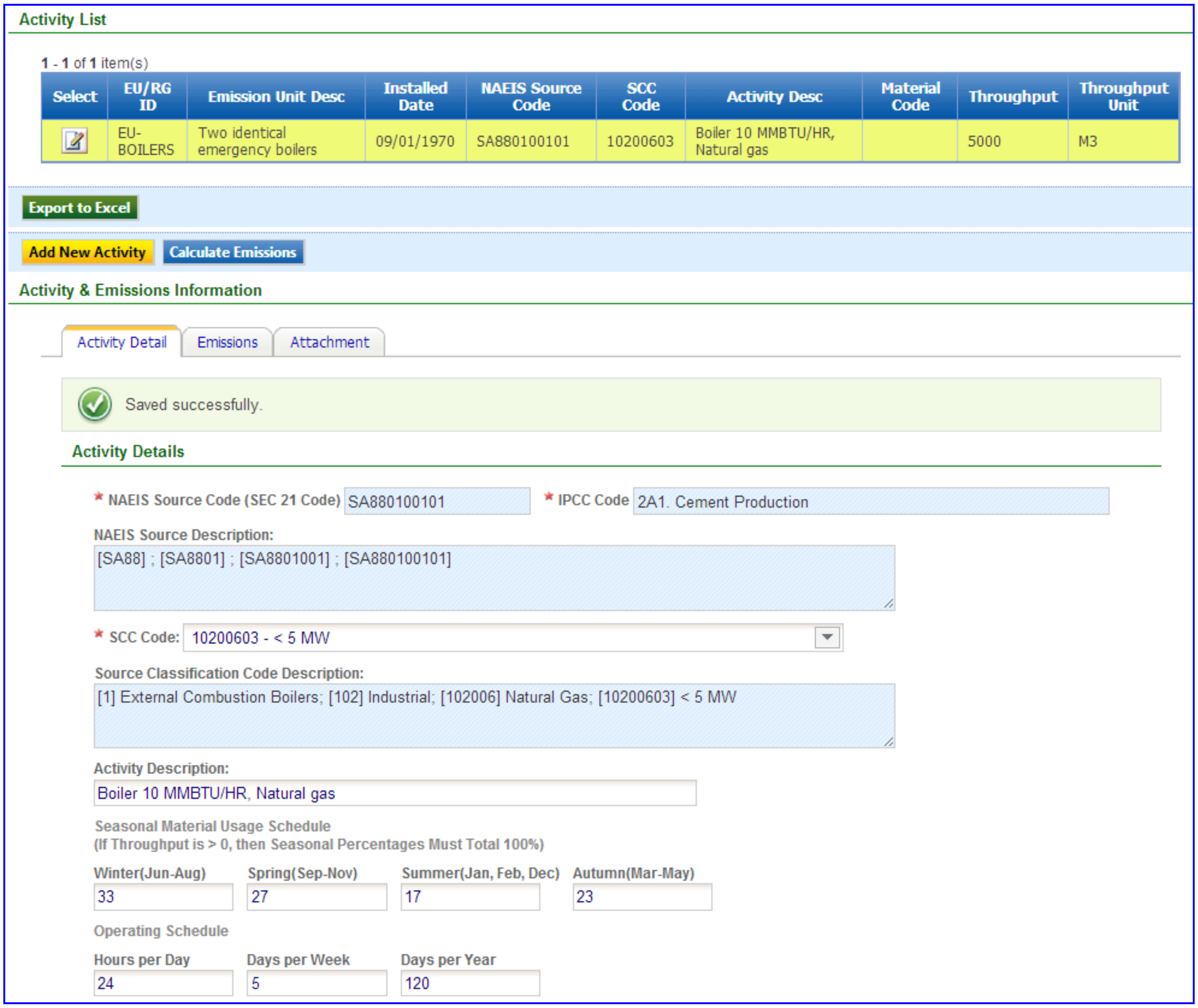


Figure 8.27a Activity and Emission Details

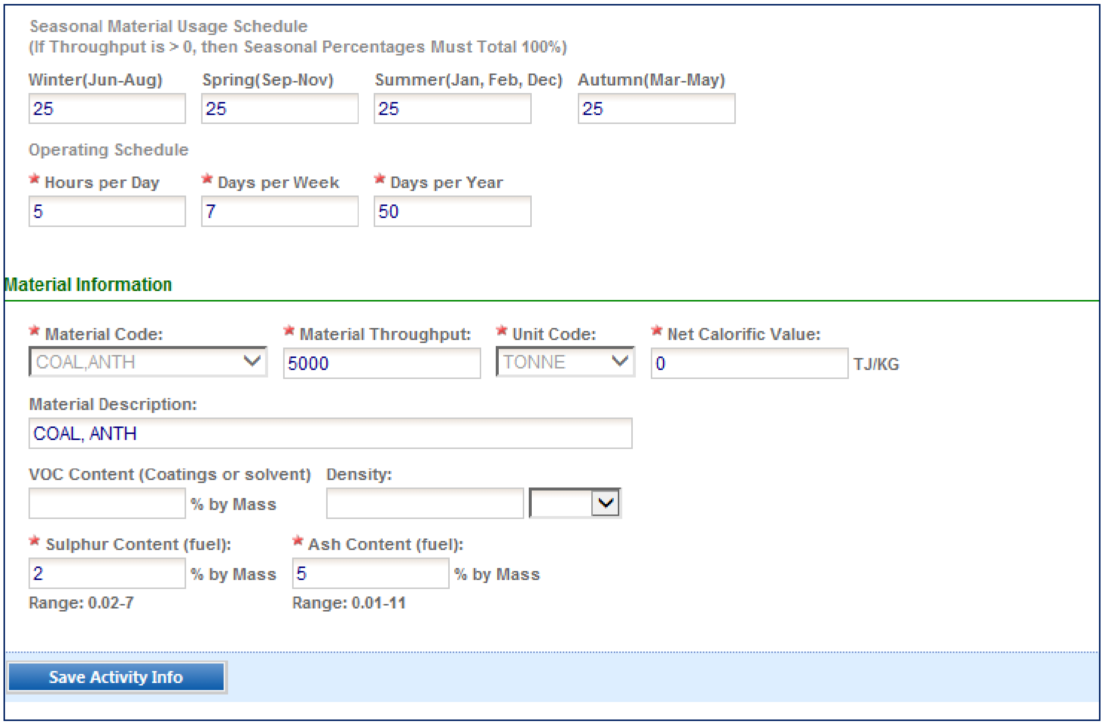


Figure 8.27b Activity and Emission Details (Part 2)

Every source must complete one of these sections for each activity associated with the emission unit or reporting group displayed in the emission unit and reporting group list (Figure 8.26)

1. **NAEIS Source Code:** The NAEIS Source Code is a set of codes mandated by the South African Department of Environmental Affairs that contain and describes the process for creating emission in an emission unit or reporting group. For licensed sources, these will be your Section 21 codes. For a new activity, Click on the "+" icon (Figure 8.24a) and a listing of all NAEIS Source Codes (NSC) will appear (Figure 8.28). Select the NSC that most accurately describes the activity from the drop-down list. If more than one activity takes place at the emission unit or reporting group, select an NSC for each of the activities that take place at the emission unit/reporting group. To add a new activity, simply click the "Add New Activity" button (Figure 8.27a).

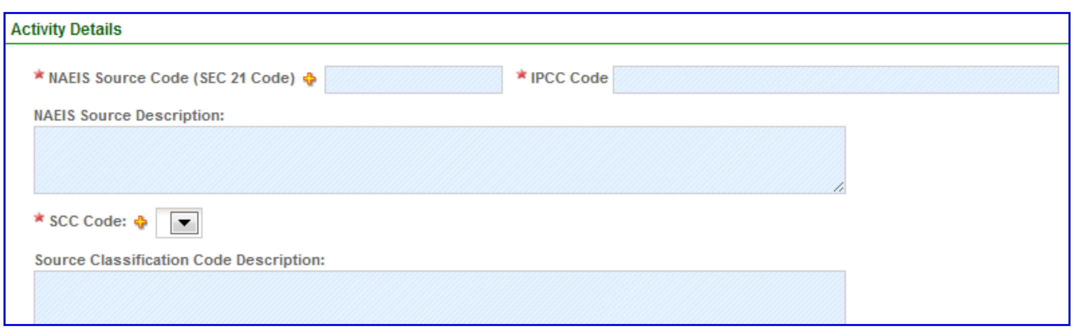


Figure 8.28 NAEIS Source Code Information

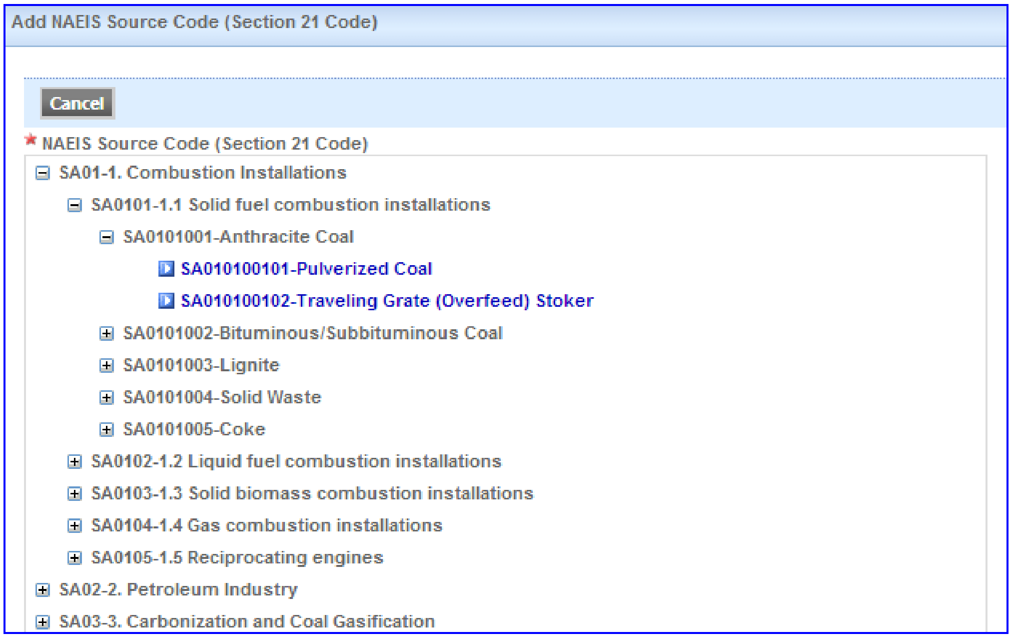


Figure 8.29 NAEIS Source Code List

2. **IPCC Code**: The Intergovernmental Panel on Climate Change (IPCC) set up at the request of member governments. Its mission is to provide assessments of information worldwide about the risk of climate change caused by human activity. The 2006 IPCC Guidelines for National Greenhouse Gas Inventories (2006 IPCC Guidelines) provide methodologies for estimating national inventories of anthropogenic emissions by sources and removals by sinks of greenhouse gases.
    - Once an NSC is selected, the IPCC Code would be selected by the system.
    - IPCC needs to be manually selected only when the uncategorized/Non-Industry NSC is chosen (Figure 8.30a&b).

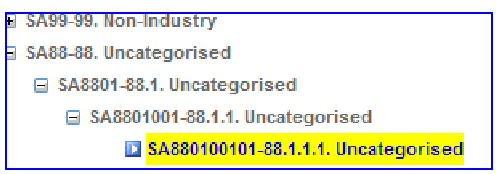


Figure 8.30a Uncategorized NSC

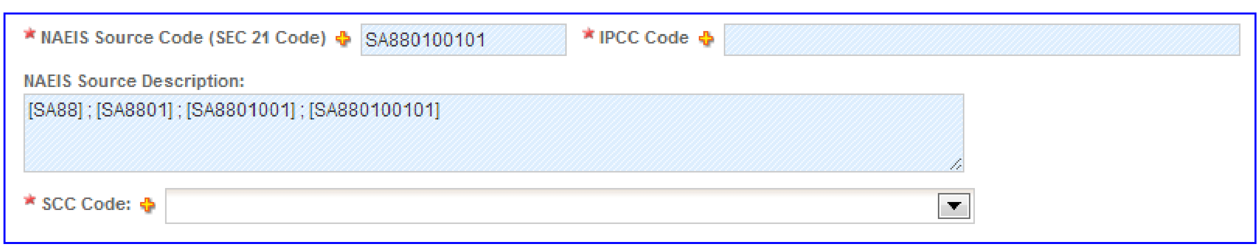


Figure 8.30b Manually Select an IPCC Code

3. **SCC Code**: Once a NSC is selected, a sub-set of Source Classification Codes (SCC) will appear. The Source Classification Code (SCC) is an eight-character code linked to the NAEIS Source code and may or may not further describe the process selected in step 1.

Figure 8.31 NSC to SCC Code Relationship

4. **Activity Description**: Provide a brief description for the process that best represents this activity. You may use the description that is provided in the read-only field "Source Classification Code Description".
5. **Seasonal Material Usage Schedule**: Enter the percentage of material used per season. The total of all four seasonal percentages must equal 100%.
6. **Hours per Day**: Enter the hours this emission unit or reporting group normally operates per day based on an annual average.
7. **Days per Week**: Enter the days this emission unit or reporting group normally operates per week based on an annual average.
8. **Days per Year**: Enter the days this emission unit or reporting group operated over the reporting year.

8.2.6.4 Material Information Section

Complete this section for the material identified for the NSC, IPCC and SCC in Step 1.

9. **Material Code**: This field is automatically pre-filled if the NSC-SCC Combination selected has a material associated with it. If this field is not pre-filled, it means the NSC-SCC Combination selected does not have a material associated with it. Click on the field and a drop-down list with a selection of material codes will be displayed. Select the most appropriate material for the NSC-SCC Combination. To make your search easier you may want to refer to the Material Code section in System Utilities Module.
10. **Material Throughput**: Enter the amount of material identified in Step 8 that was processed, produced, applied, or combusted during the reporting year. For example, if "Coating" is identified in the Material Code field, enter how many liters (L) were applied during the reporting year. Be sure that the throughput entered in this field matches the unit code pre-filled or selected in Step 10.
11. **Unit Code**: This field should be pre-filled if Step 1 and Step 9 were completed.
12. **Net Caloric Value**: This field is only required if there is Greenhouse Gas emission.
13. **Material Description**: Provide a brief description of the material that is processed, produced, applied, or combusted.
14. **VOC Content**: This field is only required if the material is a coating or solvent. Enter the weight percent of the volatile organic compounds (VOC) contained in the throughput material, "as applied." "As applied" refers to the composition of the throughput material at the point of

application. If thinners are added to the throughput material, the VOC content of the thinner must be considered when calculating the weight percent of VOC “as applied.”

15. **Density**: Density is required for materials that have a mass throughput. In the first field, enter the density of the throughput material at standard temperature and pressure. Click on the second field and a drop-down list with unit options will appear.
16. **Sulfur Content**: This field is required only if the material identified in Step 8 is a fuel. Enter the sulfur content in mass percent. Please consult the National DEA Air Quality and Climate Control Office for a list of ranges.
17. **Ash Content**: This field is required only if the material identified in Step 8 is a fuel. Enter the ash content in mass percent. Please consult the National DEA Air Quality and Climate Control Office for a list of ranges.

8.2.6.5 Portable Material Usage Schedule

If this is a portable source, the activity form will have an additional section: Portable Material Usage Schedule (Figure 8.32).

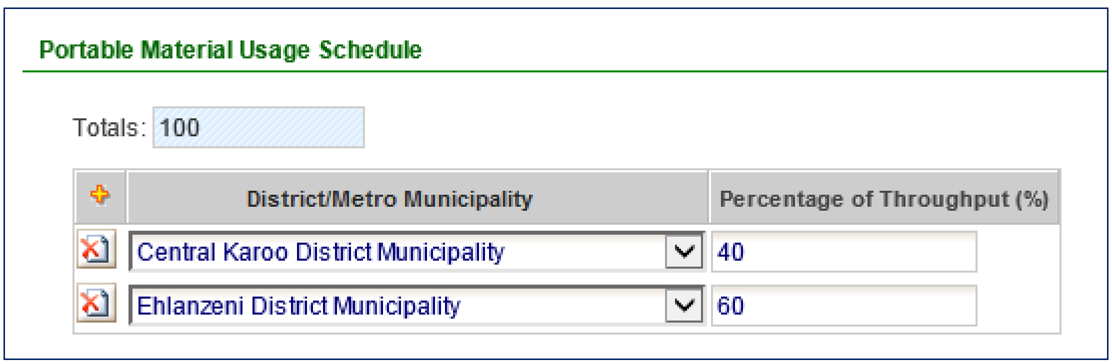


Figure 8.32 Portable Material Usage Schedule Section

18. **District/Metro Municipality**: Click the "+" icon to add a new District/Metro Municipality, or click the "x" icon to delete a District/Metro Municipality from the list.
19. **Percentage of Throughput**: Enter the percentage of throughput for each District/Metro Municipality for the process listed above. The totals of these percentages must equal 100%.

Emission Calculation: Click the "Calculation Emissions" button in Figure 8.27a to calculate all emissions under this emission unit or reporting group, depending on which activity is selected.

The Emissions Form is used to report all emissions of criteria pollutants and any other pollutants relevant to the process. An emissions record must be completed for each emission unit or reporting group identified on the emission unit and reporting group forms.

Click the "Emissions" tab to display the emission list (Figure 8.33)

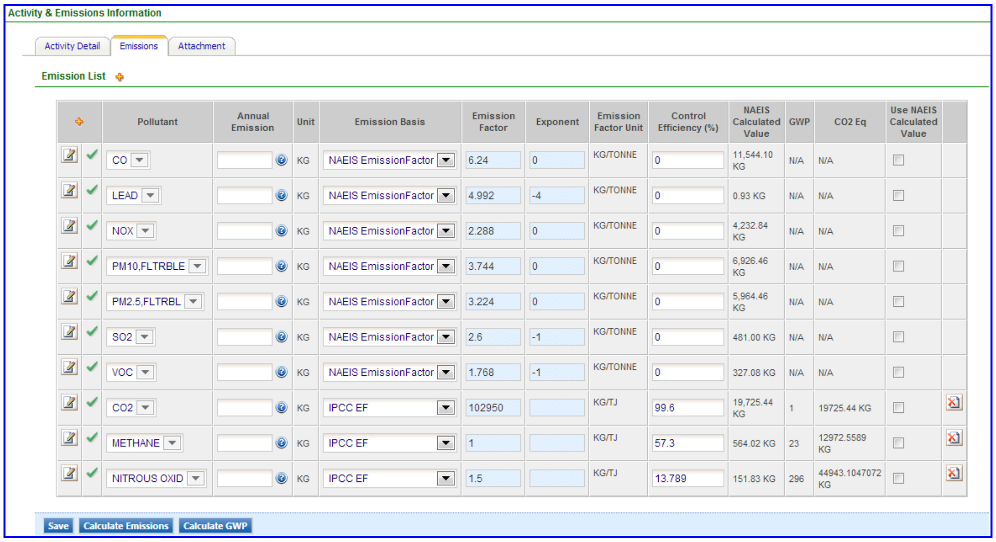


Figure 8.33 Emission List

8.2.6.6 What Emissions Must Be Reported?

When a new activity is created, or when an activity having been reported in previous years is accessed for the first time this year, all the criteria pollutants are listed in the emission list. These pollutants are required to be reported.

To report more pollutants for this activity, in the Emission List (Figure 8.33), click the "+" icon next to "Emission List" label (in the **white** area, NOT in the **gray** area) to load the emission factor window (Figure 8.34).

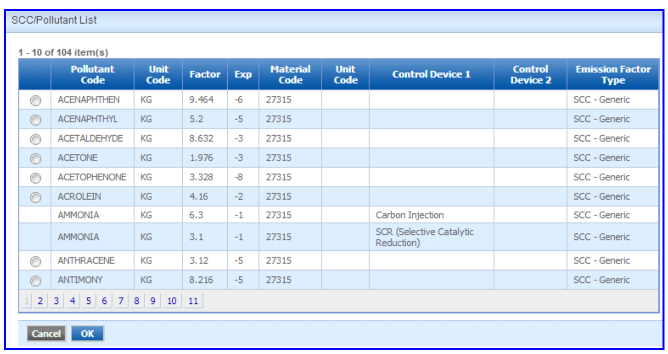
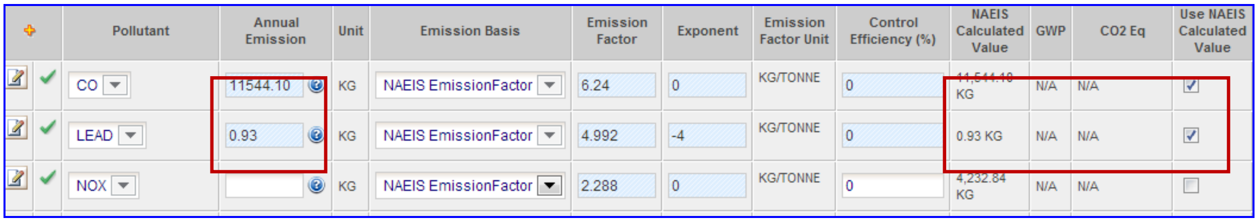


Figure 8.34 Emission Factor Table with SCC Code and Pollutant List

In the SCC/Pollutant List (see Figure 8.34), some of the criteria pollutants have additional emission factors that do not have a radio button. These are “controlled” emission factors, which are used to calculate default control efficiency. These entries will be pre-populated if you select a control device on the emission unit level. The system will not allow you to select a “controlled” emission factor.

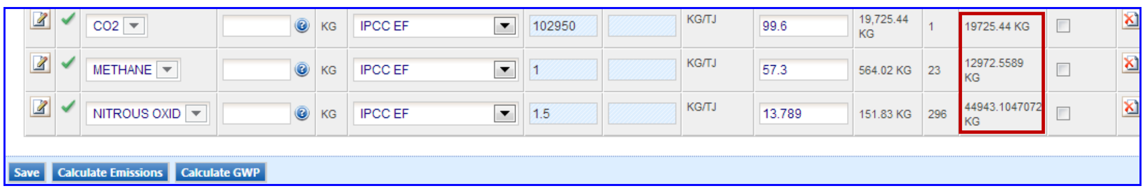
To calculate emissions for this process, click the "Calculate Emission" button in the emission list. When the calculation is completed, the "NAEIS Calculated Value" column will be populated in the grid view. If the system-calculated value is verified to be correct, click the checkbox under "Use System Calculated Value" to auto-fill the other fields of each emission (Figure 8.35).



	Pollutant	Annual Emission	Unit	Emission Basis	Emission Factor	Exponent	Emission Factor Unit	Control Efficiency (%)	NAEIS Calculated Value	GWP	CO2 Eq	Use NAEIS Calculated Value
	CO	11544.10	KG	NAEIS EmissionFactor	6.24	0	KG/TONNE	0	11,544.10 KG	N/A	N/A	☑
	LEAD	0.93	KG	NAEIS EmissionFactor	4.992	-4	KG/TONNE	0	0.93 KG	N/A	N/A	☑
	NOX		KG	NAEIS EmissionFactor	2.288	0	KG/TONNE	0	4,232.84 KG	N/A	N/A	☐

Figure 8.35 Use System Calculated Value for Emission

After the calculation, there will be a few new rows appearing on the Emission List. These are the Greenhouse Gas (GHG) with default IPCC Emission Factors filled in. The "NAEIS Calculated Value" column will be populated as well for these GHG. To calculate the CO_2 Equivalent Emission, click the “Calculate GWP” button. For calculation details, just point to the .



CO2		KG	IPCC EF	102950		KG/TJ	99.6	19,725.44 KG	1	19725.44 KG	☐
METHANE		KG	IPCC EF	1		KG/TJ	57.3	564.02 KG	23	12972.5589 KG	☐
NITROUS OXID		KG	IPCC EF	1.5		KG/TJ	13.789	151.83 KG	296	44943.1047072 KG	☐

Save | Calculate Emissions | Calculate GWP

Figure 8.36 GHG Calculation

Beside each pollutant name in the emission list, there is an icon. Click this icon to enter emission form for each emission (Figure 8.37).

8.2.6.7 Emission Form Completion Instructions

The emission form consists of emission details. No fields on this form have been carried over from the previous year’s submittal. Annual emissions values of all required pollutants must be completed. Following is an explanation of each section of the emission form as well as step-by-step instructions on how to complete the required fields.

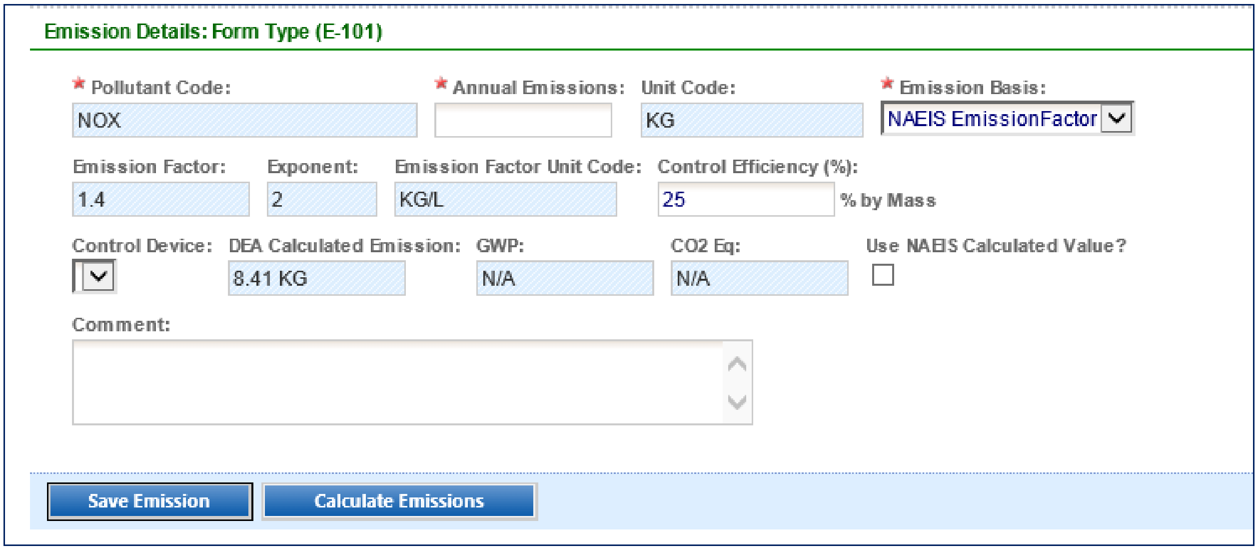


Figure 8.37 Emission Form

8.2.6.8 Emission Details

Complete this section for each criteria pollutant that is emitted from the material identified in correlated activity form.

1. **Pollutant Code**: This is non-editable field. The pollutant has been selected in the emission list page.

2. **Emission Basis**: (If this field has been pre-filled with "NAEIS Emission Factor" or "IPCC EF" and you would like to use the factors provided, skip this field). After you have identified the pollutants that need to be reported in the pollutant code field, you will need to enter the basis on which you will calculate your annual emissions for that pollutant. Click on the field and a drop-down list with your options will appear. Select the basis on which you will estimate emissions for this pollutant. Emissions should be estimated using the best available site-specific data according to the hierarchy below.
   - ***CEM*** - Continuous Emissions Monitoring
   - ***Site Specific Stack Test*** - Stack test protocol. Results from the most recent stack test (generally conducted less than five years previous) should be used.
   - ***PEM*** - Parametric Emissions Monitoring
   - ***Mass Balance*** - The method that allows estimation of emissions by analyzing inputs of a material to a process minus consumption, accumulation, and loss of that material during a process.
   - ***Tank Model*** - The TANKS model is an US-EPA computer software program that computes estimates of volatile organic compound (VOC) emissions from fixed and floating-roof storage tanks. TANKS are based on the emission estimation procedures from Chapter 7 of US-EPA's Compilation of Air Pollutant Emission Factors (AP-42), plus recent updates from the American Petroleum Institute. The TANK software can be accessed via the Internet at www.epa.gov/ttn/chief.
   - ***Landfill Model*** - This US-EPA model was developed by the Control Technology Center (CTC). The Landfill Air Emissions Estimation Model can be used to estimate emission rates for methane, carbon dioxide, non-methane organic compounds, and individual toxic air pollutants from landfills. The Landfill software can be accessed via the Internet at www.epa.gov/ttn/chief.

- ***NAEIS Emission Factor*** - SCC code/emission factors that are in the NAEIS reference table. If you are using an emission factor not provided in the emission factor table at the bottom of the screen, you should select "Other" as the emission basis.
- ***IPCC Emission Factor*** - IPCC code/emission is provided by The Intergovernmental Panel on Climate Change
- ***Other*** - If not previously identified, select "Other", and attach supporting documentation.

3. **Emission Factor/Exponent**: These fields must be completed only if you are using an emission factor to estimate emissions for the pollutant. If you are using another method to calculate your emissions (e.g. Mass Balance, TANKS, etc.), leave these fields blank. If "NAEIS Emission Factor" was entered for Step 2, these fields will be pre-filled. If "IPCC EF" was entered, these fields will be blank and not used.

List the proper emission factor, using scientific notation. The emission factor unit code will be pre-filled with the unit code pounds divided by the unit code for the material entered on the activity form.

Scientific Notation:

The emission factors are expressed in scientific notation, which means that the decimal point has been moved. If the exponent is negative, move the decimal point to the left. If the exponent is positive, move the decimal point to the right. If the exponent is zero, the decimal point does not move. For example, if a number is expressed as 2.0E-1, move the decimal point one place to the left to get 0.20. If a number is expressed as 2.0E2, move the decimal point 2 places to the right to get 200. If a number is expressed as 2.0E0, the decimal point does not move – the number is 2.0.

4. **Control Efficiency %**: Enter the control efficiency percent of the control device(s) for the pollutant being reported (this could be a combination of capture and destruction efficiencies). Control efficiencies may be listed on the equipment, in the equipment documentation, or by contacting the equipment supplier.

If you are using NAEIS emission factors, after control efficiency is entered, you can run the Emission Calculation (by clicking the "Calculate Emission" button) to automatically calculate your actual controlled emissions. If you are not using NAEIS emission factors to calculate your actual emissions, see the Control Efficiency Discussion below to calculate your actual emissions after control.

Using the Control Efficiency to Calculate Actual Emissions:

If a facility has control equipment, the actual emissions after control can be calculated by multiplying the actual uncontrolled emissions by a control factor. Calculate the control factor by subtracting the percent control efficiency (entered for Step 4) from 100 and then dividing that number by 100. Overall control efficiency is calculated by multiplying the capture efficiency by the control efficiency.

For example, if you have a control device with a capture efficiency of 85% and a control efficiency of 95%, the overall control efficiency would be 0.85 x 0.95 = 0.8075 (80.75%). Use the overall control efficiency to calculate the control factor (100 – 80.75)/100 = 0.19. Using the control factor, we can estimate the annual emissions after control. Using the control factor above, if an emission unit has actual uncontrolled emissions of 129,600 kg/year, the actual emissions after control would be 129,600 kg/year x 0.19 = 24,624 kg/year or 24.62 ton/yr. You would enter 24.62 tons into the Annual Emissions/Unit Code fields (see step 5).

5. **Annual Emissions**:

To use the emission calculator, click the "Calculate Emission" button in this form. You can enter user-calculated annual emission in this field. Otherwise, if you agree to use the system-calculated value, click the "Use System Calculated Value" checkbox, and this field will automatically populate.

6. **Comment**: If needed, enter any explanation or description of the information entered on this form in this field. If you have to submit calculations or other data to support your emissions estimate, click on the "Attachment" tab to upload your supporting documentation to system.

8.2.6.9 Non-Industrial Source Specific – Activity and Emission Form

For Non-Industrial Sources, please make sure to select SA99-99 Non-Industry Code for the NAEIS Source Code.

Figure 8.38 NAEIS Source Code – Non-Industry

In this case, IPCC Code needs to be selected manually.

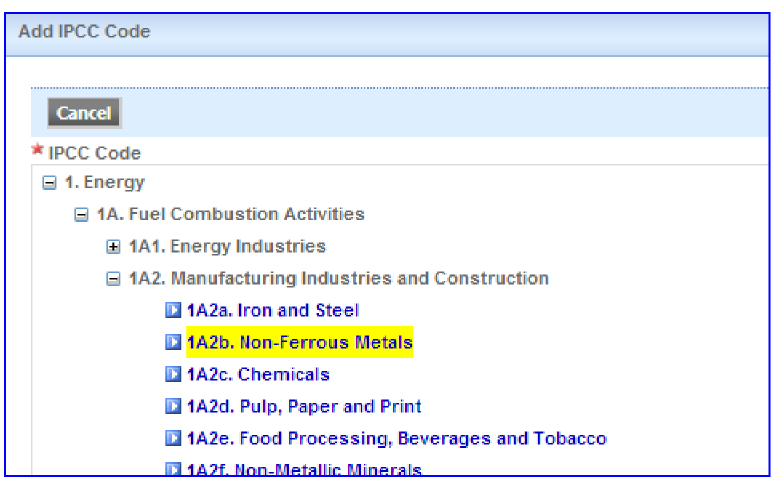


Figure 8.39 IPCC Code – Non-Industry

From there, the dropdown for the SCC Code selection will show all Non-Industrial SCC Codes, as seen below.

Figure 8.40 SCC Code – Non-Industry

8.2.7 Completeness Check

Once you have completed all the forms, use the Completeness Check function to scan the forms for possible warning/error message. The Completeness Check ensures that there are reasonable responses in required data fields. If fields are incomplete or incorrect, the System will generate warning or error messages.

The error report and messages will describe the potential problem and indicate on which form and field must be corrected. The completeness check does not verify whether the information you have entered is correct, but rather if the information you have entered is adequate for a complete submittal.

Errors generated from the Completeness Check must be corrected before the forms are submitted, while warnings will not hold back the EI Report submissions. After the corrective actions are taken, running the Completeness Check again will then re-assess the result of these actions. If you encounter any Completeness Check error messages that appear to be irresolvable, please contact the appropriate Authority accordingly.

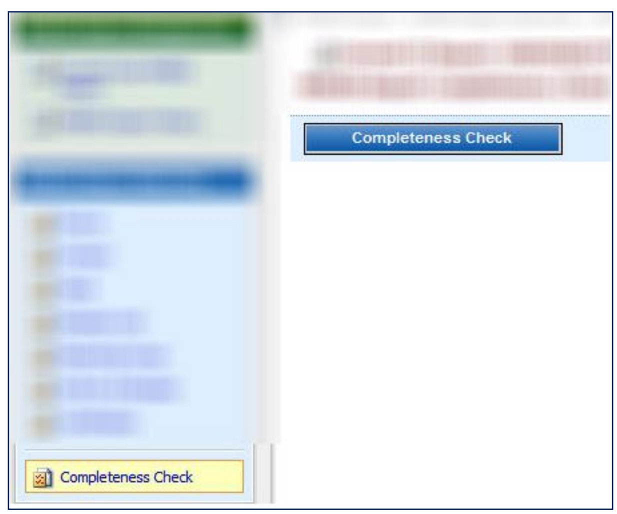


Figure 8.41 Completeness Check Function

If errors are encountered in the Completeness Check, this message will display: "Failed Completeness Check".

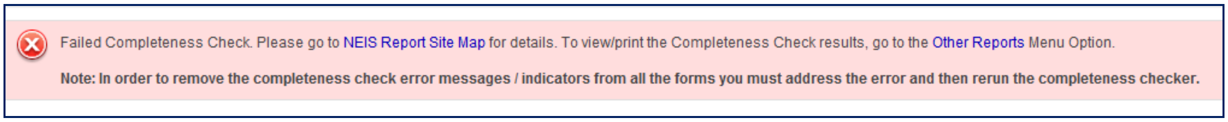


Figure 8.42 Completeness Check with Error(s)

If no error is generated from the Completeness Check, this message will display: "Passed Completeness Check".

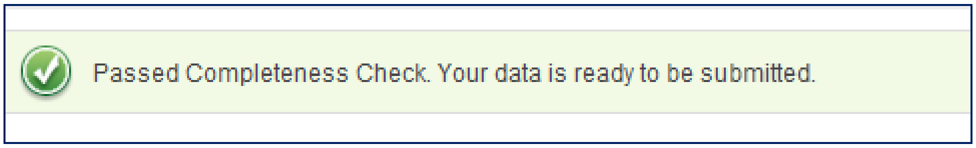


Figure 8.43 Completeness Check without Error

There are three ways of viewing error or warning message details:

1. Go to the NAEIS Report Site Map and hover the mouse over the data entry form with an error or warning icon (Figure 8.42). The error message is indicated by the use of “Red” icon. The warning message is indicated by the use of “Yellow” icon. The error or warning message will appear in the tooltips.

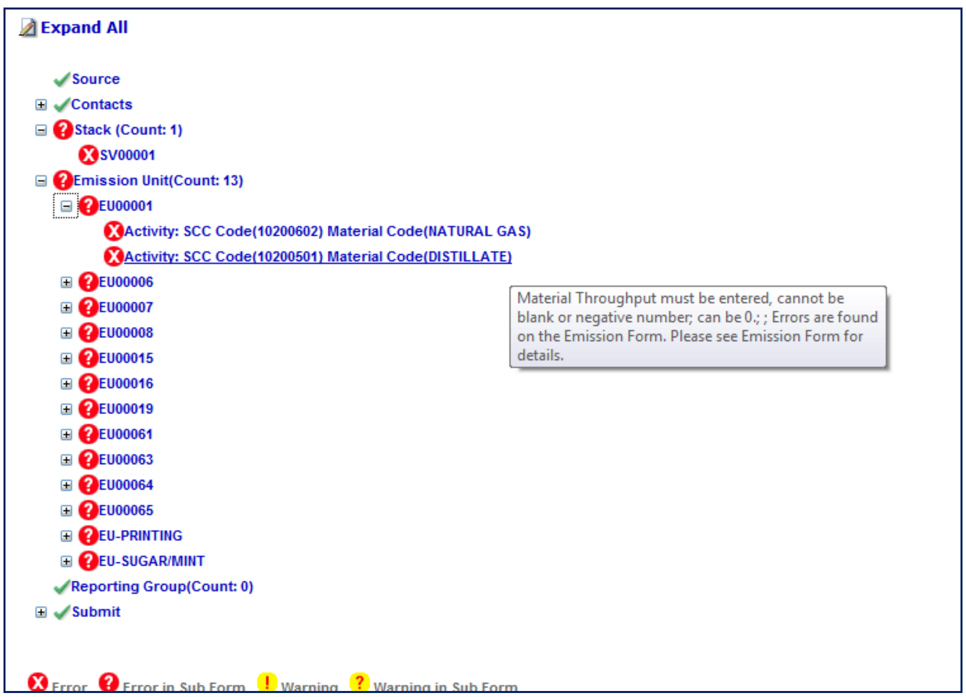


Figure 8.44 NAEIS Report Site Map - Completeness Check Error/Warning Message

2. In the Site Map, click the entry with an error or warning icon. The system will lead you to the specific source, contact, stack, emission unit, reporting group, activity, preparer, or Accounting Officer form. The warning/error message generated from the completeness check will display in the upper portion of the specific form (shown below). The error message is indicated by the use of “Red” background. The warning message is indicated by the use of “Yellow” background.

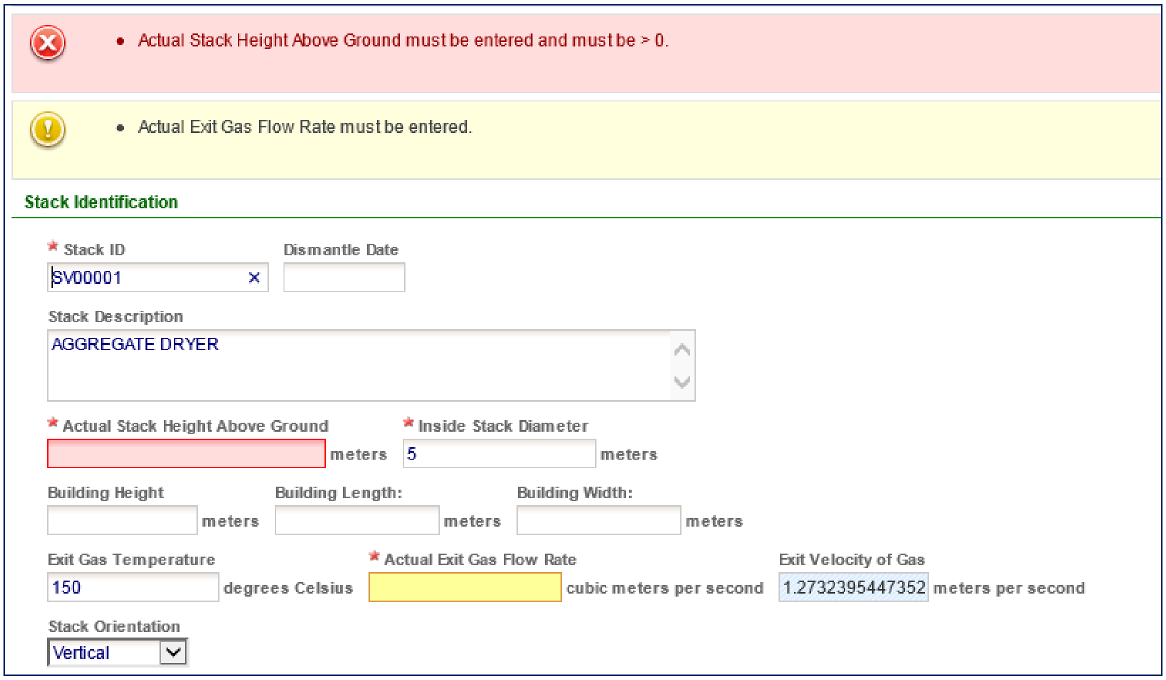


Figure 8.45 Sample: Stack Form with Completeness Check Warning/Error Displayed

3. All of the Completeness Check errors and warnings are compiled into a report, “Completeness Check Report”. The “Completeness Check Report” can be accessed in NAEIS Report Module → Report Management → Other Reports → Completeness Check Report (See Figure 8.46).

Figure 8.46 Completeness Check Report

Click the "View" icon next to "Completeness Check Report" to view the details of the report. The report will list the basic information of this source, and the error and warning messages in each form. This report will be useful in the correction of relevant forms based on the Completeness Check results.

A sample of the Completeness Check Report is shown in Figure 8.47.

National Air Emissions Inventory System

(NAEIS)

Completeness Check Error Report

Source Name : A QA Demo - A0098 **Reporting Year :** 2013

Source Location : 5614 Wessel Road Breede Valley Local Municipality, WC 3444

Total Errors Found : 7

A-101 ACTIVITY

Emission Unit ID - EU00004, SCC Code 3-05-002-02

- Material Throughput must be entered, cannot be blank or negative number; can be 0.
- Material Unit Code must be entered.

Figure 8.47 Sample of Completeness Check Report

8.2.8 Certification and Submission

8.2.8.1 Preparer Form Overview

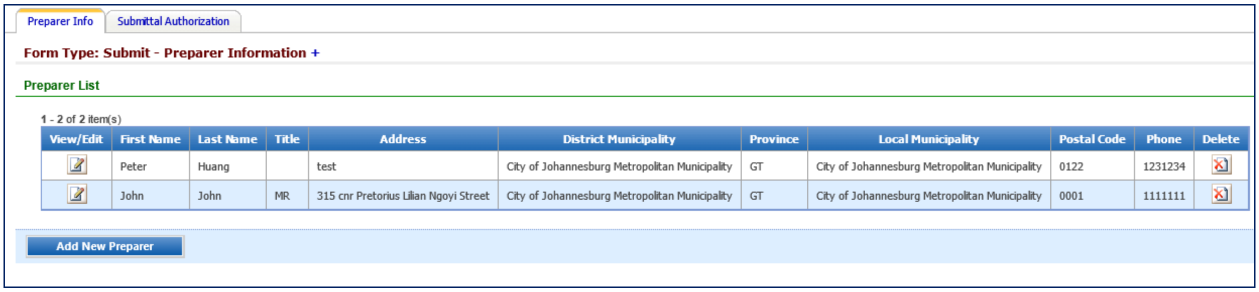
The Preparer Form is an optional form which displays information about the person(s) responsible for the individual Emission Units in the NAEIS Report.

Some companies have different people responsible for emissions from different processes at the facility. Therefore, instead of making one person responsible for all of the emissions, each person can list their respective data. If a facility has more than one preparer listed on this form, the reporting groups and emission units that the preparer is responsible for must be listed on the "Emission Unit(s) Preparer worked on" section of the form.

8.2.8.2 Preparer Form Completion Instructions

Completion of this form consists of three sections: the Preparer List section, the Preparer Information section, and the "Emission Unit(s) Preparer worked on" section. If you submitted a NAEIS report during a previous reporting period, all of this information should be pre-filled. If any information has changed or needs to be updated, edit the proper fields. If all the information that is pre-filled is still accurate, you do not have to complete this form. Following is an explanation of each section of the preparer form, as well as step-by-step instructions on how to complete the required fields.

8.2.8.3 Preparer List Section



Preparer Info | Submittal Authorization

Form Type: Submit - Preparer Information +

Preparer List

1 - 2 of 2 item(s)

View/Edit	First Name	Last Name	Title	Address	District Municipality	Province	Local Municipality	Postal Code	Phone	Delete
	Peter	Huang		test	City of Johannesburg Metropolitan Municipality	GT	City of Johannesburg Metropolitan Municipality	0122	1231234	
	John	John	MR	315 cnr Pretorius Lilian Ngoyi Street	City of Johannesburg Metropolitan Municipality	GT	City of Johannesburg Metropolitan Municipality	0001	1111111	

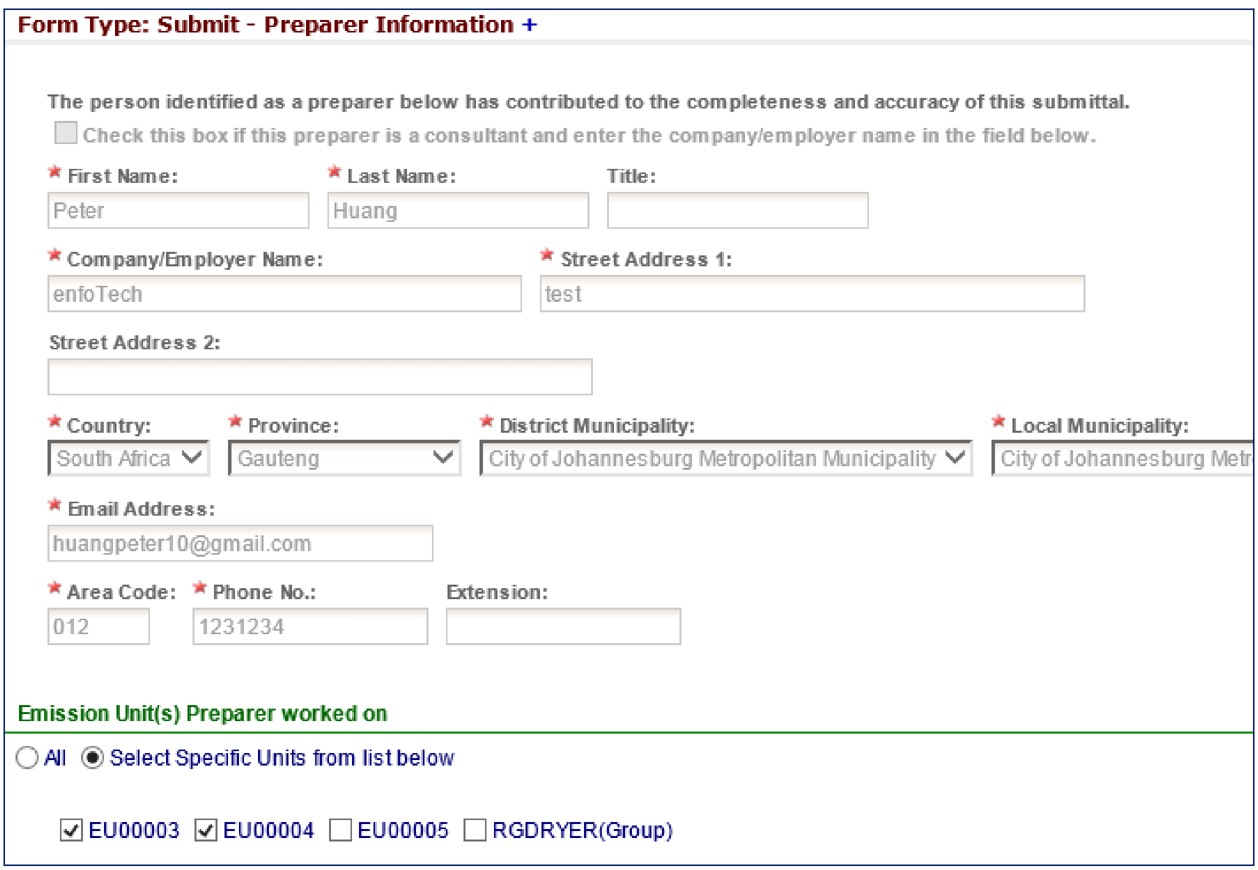
Add New Preparer

Figure 8.48 Preparer List

The Preparer List shows the current preparers who have contributed to the NAEIS reporting of this source. Click "Add New Preparer" to add any preparer that is not in this list but has prepared the data entry forms.

Click the "View/Edit" icon to access the preparer form.

8.2.8.4 Preparer Information Section



Form Type: Submit - Preparer Information +

The person identified as a preparer below has contributed to the completeness and accuracy of this submittal.

Check this box if this preparer is a consultant and enter the company/employer name in the field below.

* First Name: Peter
* Last Name: Huang
Title:

* Company/Employer Name: enfoTech
* Street Address 1: test

Street Address 2:

* Country: South Africa
* Province: Gauteng
* District Municipality: City of Johannesburg Metropolitan Municipality
* Local Municipality: City of Johannesburg Metr

* Email Address: huangpeter10@gmail.com

* Area Code: 012
* Phone No.: 1231234
Extension:

Emission Unit(s) Preparer worked on

All | Select Specific Units from list below

EU00003 | EU00004 | EU00005 | RGDRYER(Group)

Figure 8.49 Preparer Form

Complete the fields in this section for each preparer. Follow the steps below (refer to the form in Figure 8.49).

1. **Company Name**: Enter the company name with which the preparer is associated.

2. **Preparer's Information**: Enter the preparer's name, title, mailing address, telephone, fax number, and e-mail address. Every source must have at least one preparer.

3. **Emission Unit(s) Preparer worked on:**

   - If there is only one preparer in this source, select the "All" radio button.

   - When there is more than one preparer in this source, select the radio button "Select Specific Units from list below", and check the applicable emission units and reporting groups.

8.2.8.5 Primary Preparer Form Overview

Click the Certification tab (Figure 8.50) and enter the Accounting Officer Form.

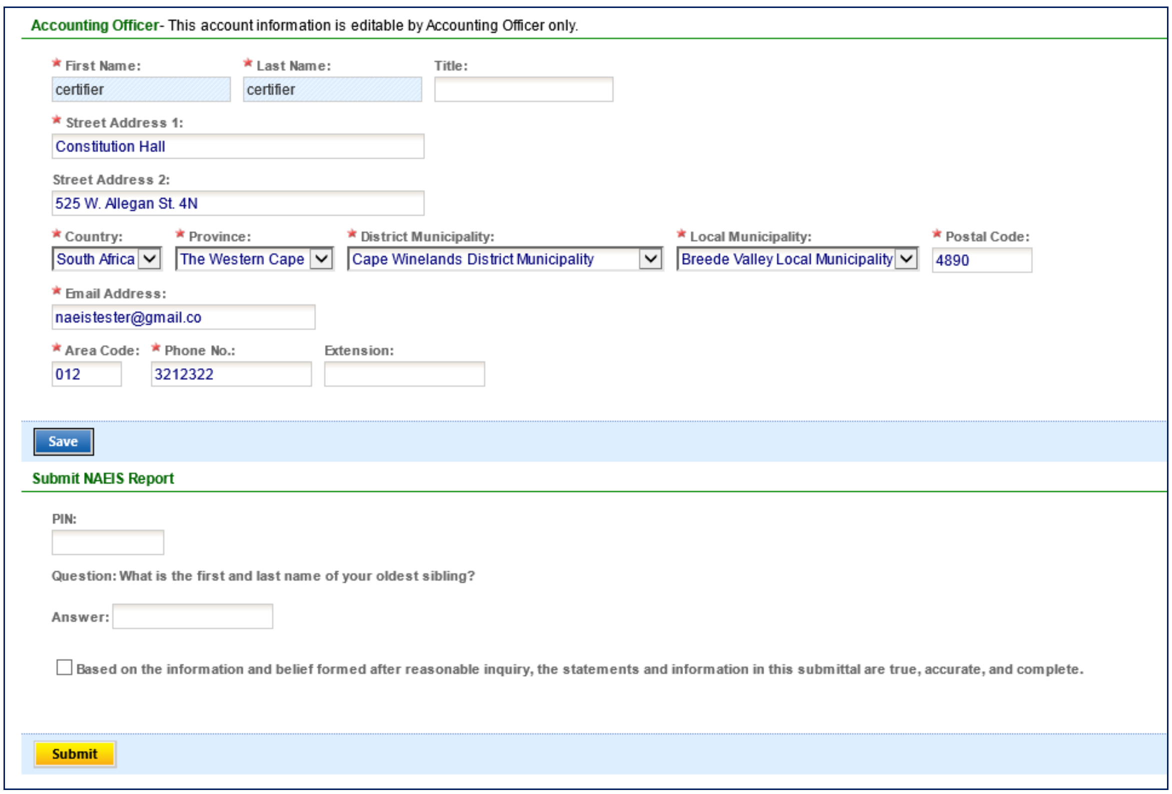


Figure 8.50 Accounting Officer Form

This form is required for all submittals. The Accounting Officer of the NAEIS Report submission will need to fill in his/her contact information here, certify the data entry forms, and make the submission.

8.2.8.6 Form Completion Instructions

1. **Accounting Officer Contact Information**: Enter the Accounting Officer's name, title, mailing address, telephone, fax number, and e-mail address.

2. **PIN**: Enter the PIN number. The PIN number can be retrieved in the "My Account" module.

3. **Security Question & Answer**: A randomly picked security question will display for the Primary Preparer to answer. Enter the user-defined answer to this question. The security questions and answers will be set when the user logs into the NAEI system for the first time. They can be accessed in "My Account" module as well.

4. **Submission**. When everything in the data entry form is verified, click the checkbox "Based on the information and belief formed after reasonable inquiry, the statements and information in this submittal are true, accurate, and complete." Click the "Submit" button to submit the NAEIS Report.

8.2.8.7 Completeness Check Executed by the System When an EI Report is Submitted

When an EI Report is submitted, a completeness check will be executed by the system on all data entry forms. If the completeness check failed, the error message(s) will display in the upper portion of page.

Upon seeing this message, go to the NAEIS Report Site Map (on the left navigation panel) to review the form errors, and make applicable corrections to ensure the validity of submitted data. Then, submit the EI Report again.

If the completeness check passes, an EI Report submission successful message will display in the upper portion of page.

Please see Section 8.7 for more information on Completeness Check.

8.2.9 Reports

The use of reports within the NAEIS is a feature that allows authority users to view data about specific EI Reports in a presentable format. Reports can be exported into several different formats (excel, word, pdf) and can be printed upon command. These are very helpful when authority users need to perform further analysis on the emission data for a particular source. Because of the reports flexibility, it can show comparison between the current year data and previous years' data. This is helpful in allowing auditors to draw comparison between different years.

The following list contains pre-defined reports that exist in the NAEI System.

1. **Source Summary Report** – lists user-entered source, contact, emission unit, stack, activity, and emission data, presented in a summarized table formats.

2. **NAEIS Data Entry Forms –** prints the user-entered Source, Contact, Emission Unit, Stack, Activity, Emissions, Preparer, and Certifier data in the format of "paper" EI forms. This report has the look and feel of a traditional "paper" EI Report.
3. **Additions Report** – displays all Stacks, Emission Units, Reporting Groups, SCC Code Activity, and Preparers (Operators) that have been added to the source in this reporting year. For example, if you add a new stack to the Stack form, then that stack will appear on the Additions report.

4. **Removed Report** – displays all Stacks, Emission Units, Reporting Groups, SCC Code Activity, and Preparers (Operators) that have been removed from the source in this reporting year. For example, if you delete a stack from the Stack List, then that stack will appear on the Removed Report. All Emission Units and Stacks that have a "Dismantle Date" entered will also be listed on the Removed Report. Information that is dismantled or deleted from the system will not appear in the blank report in the following year.

5. **Emission Comparison (Source Totals Report)** - Shows the comparison between the emissions calculated by the reporting facility and the emissions calculated by DEA. This is for the whole source in general. **Note that this report is only applicable to Industrial sources.**

6. **Emission Comparison (Emission Unit Totals Report)** – Shows the comparison between the emissions calculated by the reporting facility and the emissions calculated by DEA. This is sorted by emission unit. **Note that this report is only applicable to Industrial sources.**

7. **Completeness Check Report** – uses the administrative completeness check to edit the entered data for errors. The Completeness Check edit must result in zero errors before the database can be submitted. This completeness check ensures that there are reasonable responses in required data fields. If something is missing or incorrect, the system will generate an error report to show the error messages. The error report will describe the problem and indicate which form and field must be corrected. **Note that this report is only applicable to Industry type sources.**

In each pop-up report window, you will see an option of "view/print/export" at the top of the report (Figure 8.51).

To export, select a file format from the drop down list, then click "export". Choose the file path you want to save and then save the file.

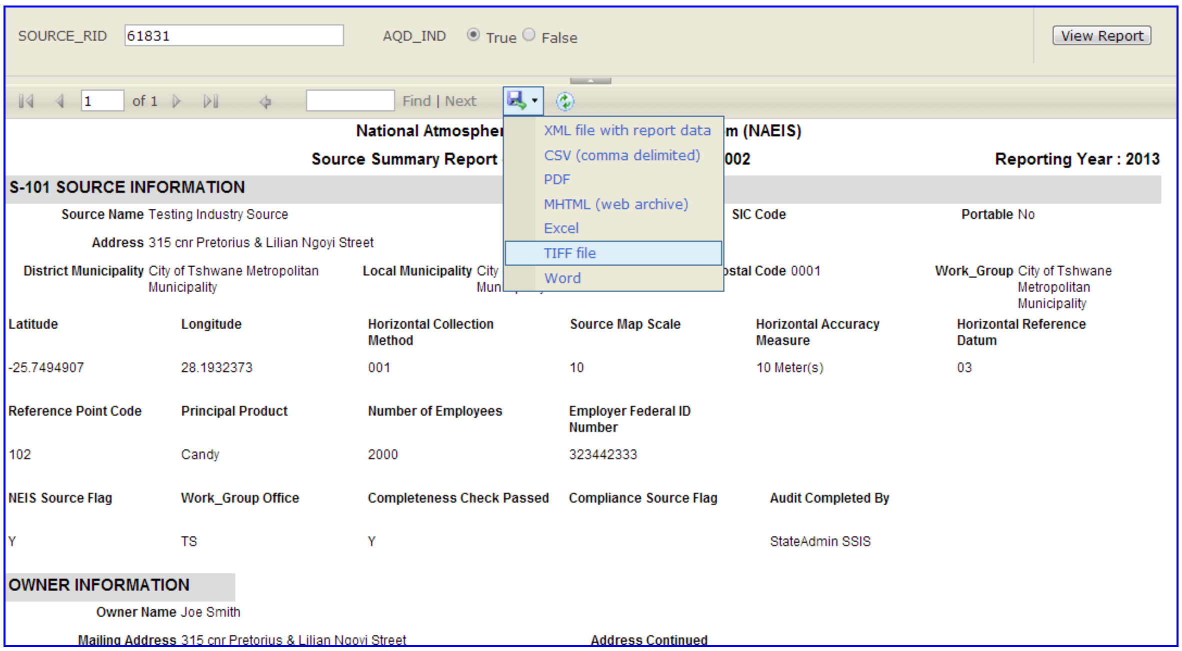


Figure 8.51 View/Export a Report

8.3 *NAEIS Reporting Obligation Management*

Compliance Officers may want to perform a search at any time during the reporting period to see which facilities have submitted their EI Reports and which have not. This chapter details steps to perform these searches as well as send out notifications for non-compliance. Notifications for Non-Compliance is an e-mail sent out to the Industry's AO detailing that the deadline to submit the EI Report has passed and that they must do so immediately.

8.3.1 Submission Tracking

Submission tracking allows authority users to track reports of different statuses. For instance, you may view all reports that have not been submitted. In addition, you may view all reports that have passed audit. A scenario has been provided below.

Step 1: Go to NAEIS Report >> Current Year NAEIS Report.

Step 2: This page will list out all of the current year reports and their statuses.

Step 3: To view all reports that have not been submitted, select "Draft" under the "Status" filter.

Step 4: Click the **"Search"** button.

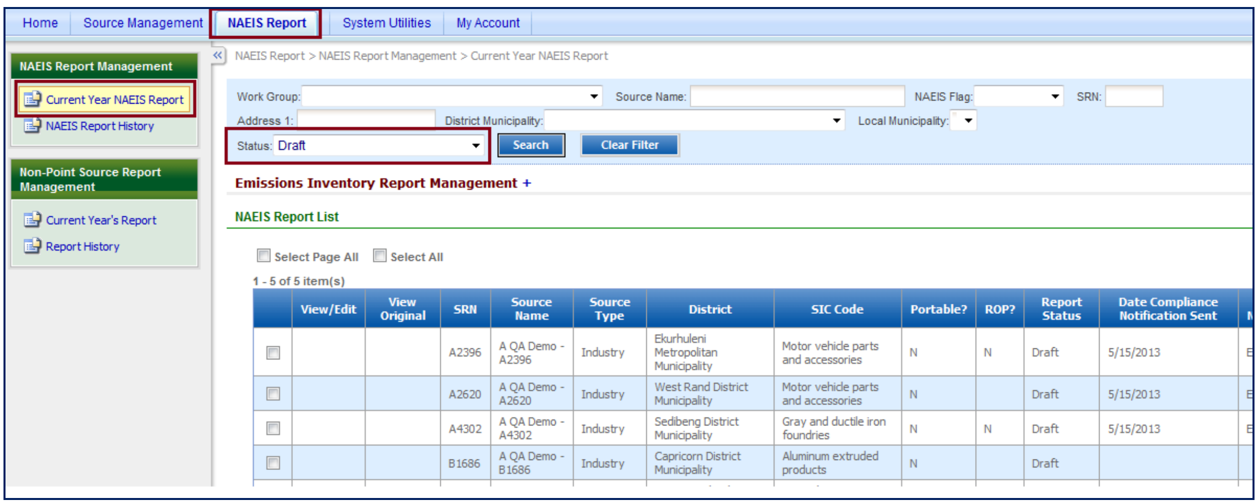


Figure 9.1 Submissions Tracking via NAEIS Report Module

8.3.2 Non-Compliance Submission Notification

For submissions that have not been submitted past the deadline, Compliance Officers have the capability of sending these notifications of non-compliance. Please follow the steps below to perform this action:

Step 1: Go to NAEIS Report >> Current Year NAEIS Report.

Step 2: To view all reports that have not been submitted, select "Draft" under the "Status" filter.

Step 3: Click the "Search" button.

Step 4: Select the Sources in which you wish to notify of Non-Compliance.

Step 5: Click the **"eNotify"** button.

Step 6: A pre-defined e-mail template will appear. Modify the template if necessary.

Step 7: Click the **"Send"** button.

Note that the grid view table displays information regarding the compliance notification. It includes columns for Date Compliance Notification Sent, Compliance Notification Method, Compliance Confirm Received, Date Confirmed.

	SIC Code	Portable?	ROP?	Report Status	Date Compliance Notification Sent	Compliance Notification Method	Compliance Confirm Received?	Date Confirmed
	Motor vehicle parts and accessories	N	N	Draft	5/15/2013	Email	No	
	Motor vehicle parts and accessories	N		Draft	5/15/2013	Email	No	
	Gray and ductile iron foundries	N	N	Draft	5/15/2013	Email	No	
	Aluminum extruded products	N		Draft				
	Natural gas transmission	N	Y	Draft				

Figure 9.2 Non-Compliance Submission Notification

8.4 *NAEIS Audit Console*

After NAEIS reports are submitted, some of the reports will be audited. The auditing will ensure the quality of source-reported data.

The Pre-Audit and Audit function will be accessed in Audit Console.

Each reporting year, some NAEIS reports will be audited. Audit Console is a centralized module for state auditors to Pre-Audit, Assign Audit, and Audit. Click Source Management - Audit Console to load the Audit Console (Figure 10.1).

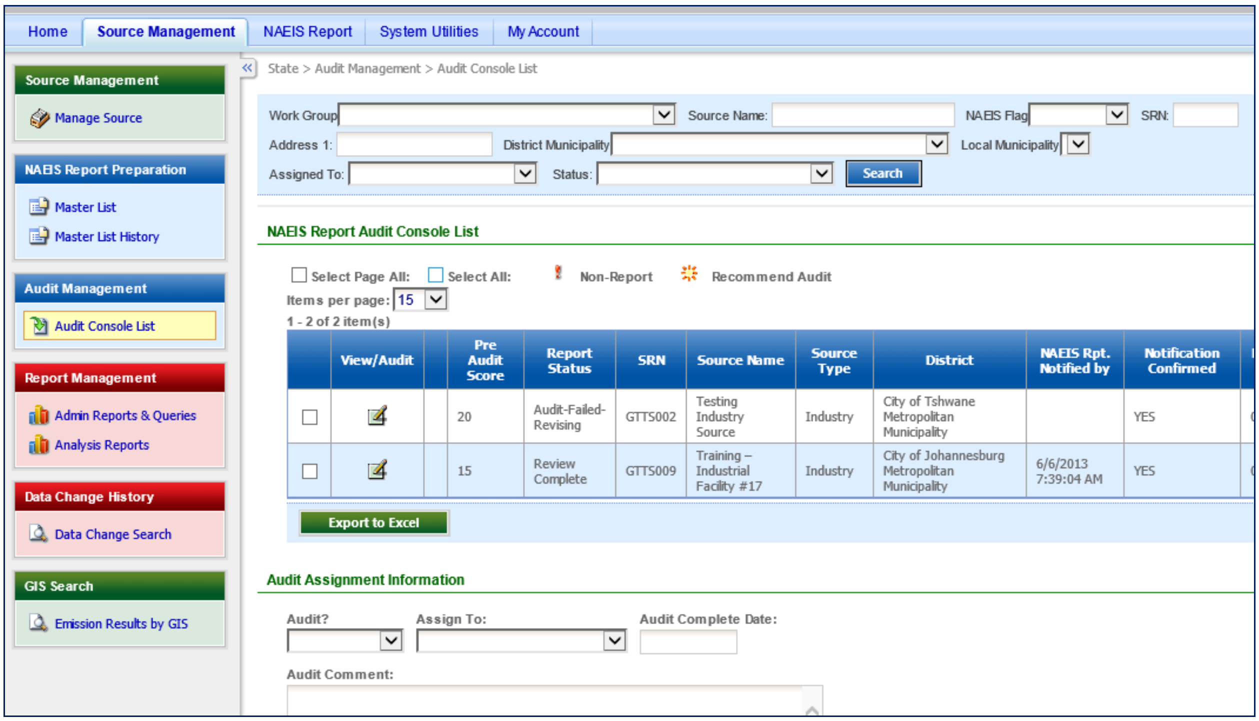


Figure 10.1 Audit Console Web Page

To search for a specific source, use the Search Panel. In the search panel (Figure 10.1), specify the search criteria and click the **Search** button to find the expected sources. The search criteria include:

- Work Group (District)
- Source Name
- NAEIS Flag
- SRN
- Address
- District/Metro Municipality
- Local Municipality
- Assigned To
- Status: This is the processing status of each report.

8.4.1 Pre-Audit Result Tab

When a report is submitted, the system will automatically perform the Pre-Audit process. In the process, the system will identify sources recommended for auditing.

The following audit recommendations will be displayed here if they are identified in the Pre-Audit process:

- Stack Added/Removed
- Emission Unit Added/Removed
- Reporting Group Added/Removed
- Activities Added/Removed
- Completeness Check Warning Messages >50
- Emissions Exceed Threshold Value
- Reported Material Throughput Exceeds design capacity
- Previous Year Comparison report > 20% (for 1 to <4 tonne mass difference)
- Previous Year Comparison report > 20% (for 4 to <15 tonne mass difference)
- Previous Year Comparison report > 20% (for 15 to <40 tonne mass difference)
- Previous Year Comparison report (for >40 tonne mass difference)

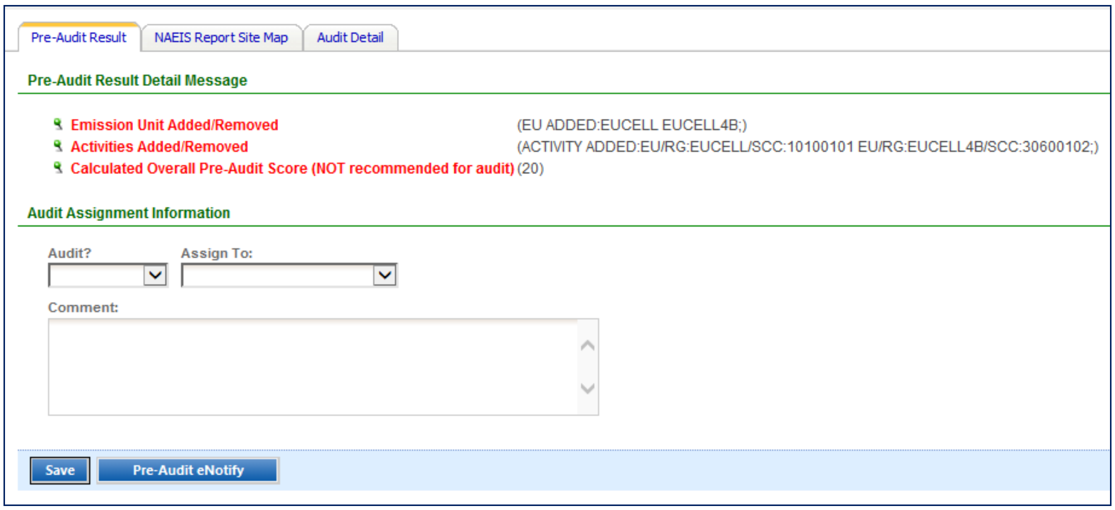


Figure 10.2 Pre-Audit Result Tab

Based on the Pre-Audit results, an auditor can choose whether or not to forego the audit. The next section demonstrates how to assign audits to sources.

8.4.2 Audit Assignment

If authority users determine that a source is required to be audited, they can complete the Audit Assignment Information section (Figure 10.3). The source(s) to be audited can be set individually or in a batch by selecting one or more source(s) in the Audit Console grid-view.

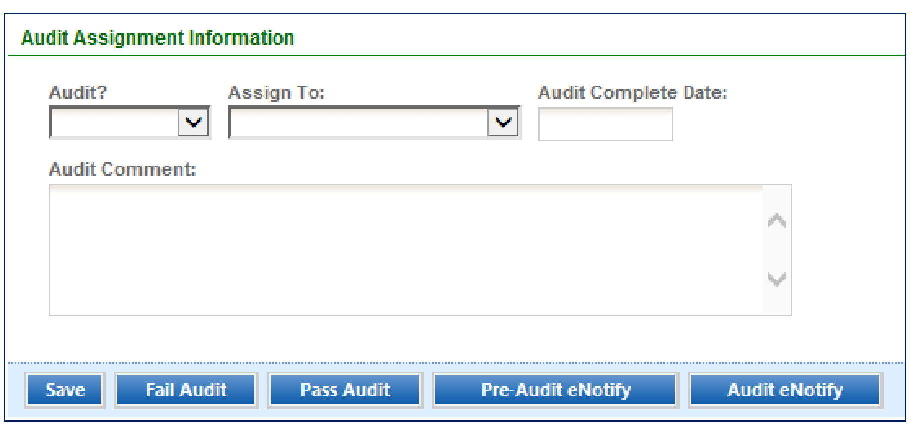


Figure 10.3 Audit Assignment Information

After the authority user determines whether or not a source needs audit, he/she can send out a Pre-Audit Notify (Figure 10.3) to notify users whether or not their report has been selected for further review. An example of a Pre-Audit eNotify e-mail is shown below:

From: info@environment.gov.za Sent: Thu 8/29/2013 1
To: sony_su@enfotech.com; kyle_kou@enfotech.com
Cc:
Subject: NAEIS Pre-Audit Notification

"Testing Industry Source,
This e-mail has been sent to notify you that the system has performed a pre-audit on your submission. The results of your pre-audit that indicates whether or not the submission will be audited is shown below:

Need Auditing?: No
Comment:

If the status is "No", your submission will require no further review and the status has been changed to "Review Complete".
If the status is "Yes", your submission will require further review and the status has been changed to "Auditing". You will receive another e-mail in the future to notify you of your audit results.

NAEIS auto-generated System Message

Figure 10.4 Pre-Audit Notification

8.4.3 NAEIS Report Site Map in Audit Module

To see the details of each data entry form, click on the NAEIS Report Site Map tab (Figure 10.5). Click any form name and the system will lead users to the corresponding data entry form.

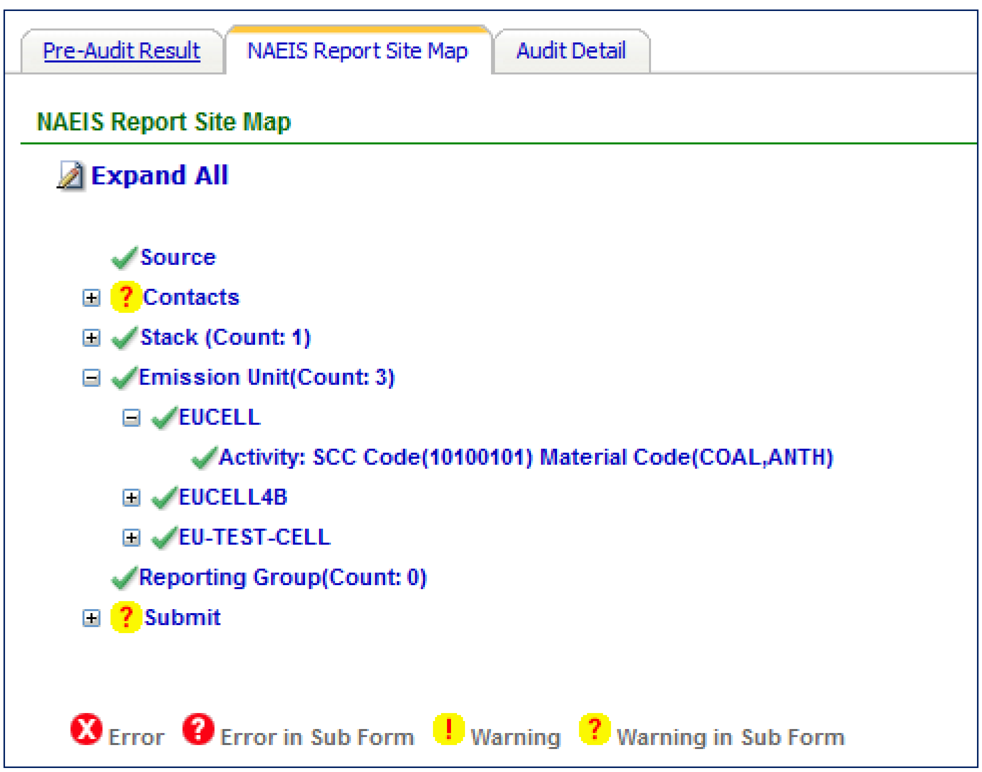


Figure 10.5 NAEIS Report Site Map

8.4.4 Audit Detail Tab

To audit a NAEIS report, click on the Audit Detail tab (Figure 10.6). In this tab, the authority users may perform the following actions:

- View Audit Reports/Checklist (Figure 10.6 Area 1)
- Determine which Audit Reports/Checklist Evaluated (Figure 10.6 Area 2)
- Enter Comments for Audit Reports/Checklist Evaluated (Figure 10.6 Area 2)
- Revise NAEIS Report for selected Source via clicking the “Revise NAEIS Report” button
- Determine the Audit Result ("Fail" or "Pass") for the selected source (Figure 10.6 Area 3)
- Enter an “overall” audit result comment (Figure 10.6 Area 3)

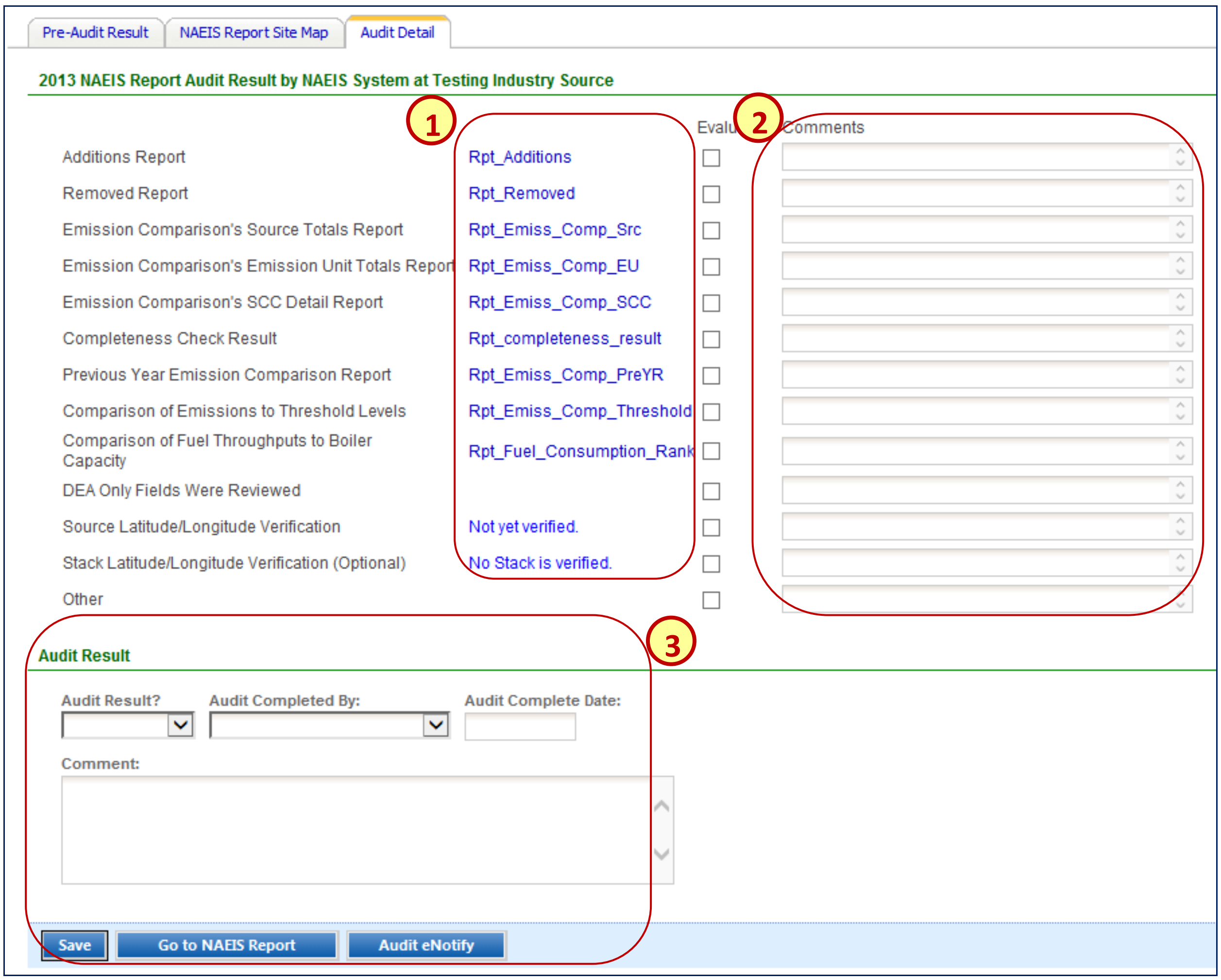
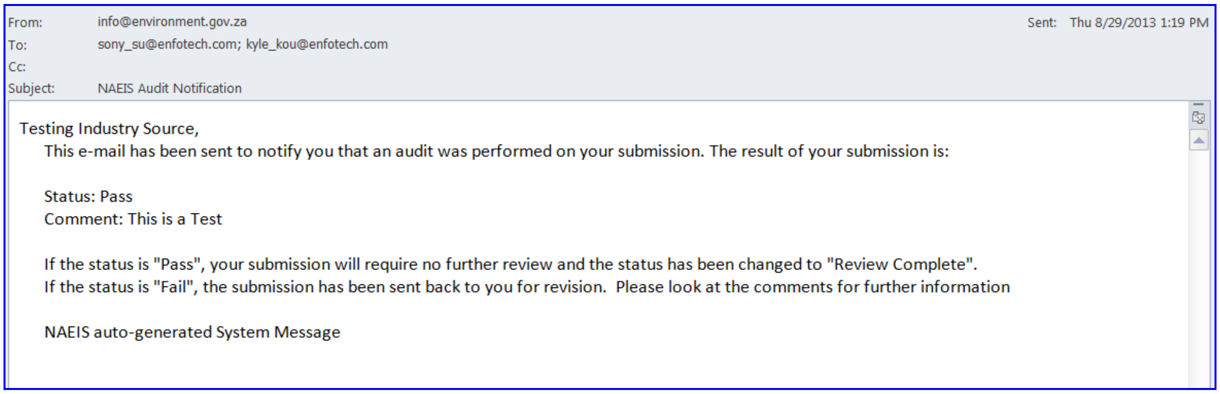


Figure 10.6 Audit Detail Tab

If a NAEIS report passes the audit, its status will be updated to Review Complete.

If a NAEIS report fails the audit, its status will change to Audit-Failed. In this case, industry users will need modify the reports and re-submit.

After the authority user completes the audit, he/she can send out an Audit Notification (Figure 10.7) to notify users of their audit result. An example of an Audit eNotify e-mail is shown below:



From: info@environment.gov.za
To: sony_su@enfotech.com; kyle_kou@enfotech.com
Cc:
Subject: NAEIS Audit Notification
Sent: Thu 8/29/2013 1:19 PM

Testing Industry Source,

This e-mail has been sent to notify you that an audit was performed on your submission. The result of your submission is:

Status: Pass
Comment: This is a Test

If the status is "Pass", your submission will require no further review and the status has been changed to "Review Complete".
If the status is "Fail", the submission has been sent back to you for revision. Please look at the comments for further information

NAEIS auto-generated System Message

Figure 10.7 Audit Notification

8.5 *NAEIS Data Mining and GIS*

8.5.1 GHG Data Analysis Report

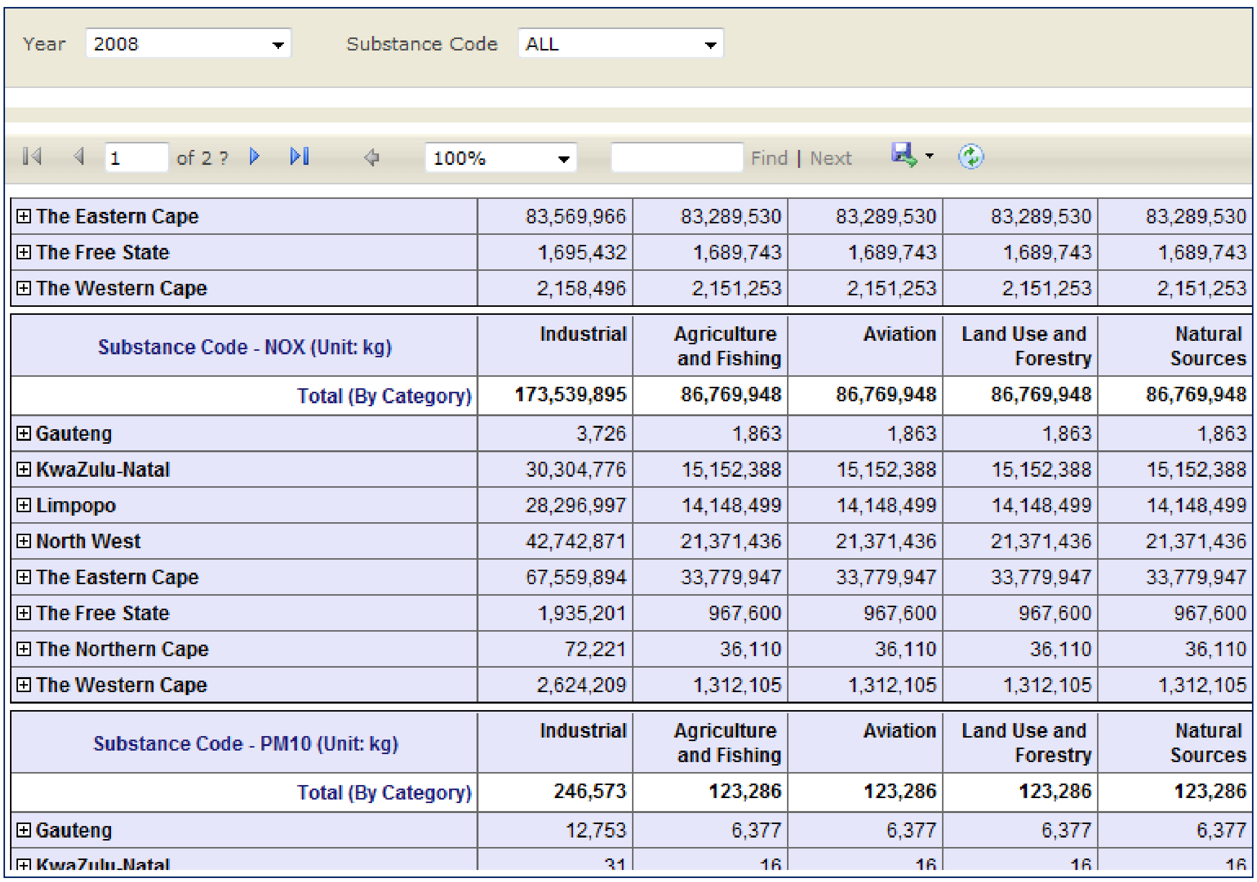
The Data Analysis Reporting Module allows users to query emission data for a select list of pollutants under a given inventory year. Authority users may select the specific IPCC sector of interest. Then, they may narrow down by location of interest.

Steps for launching the Data Analysis Report are outlined below.

Step 1: Navigate to Source Management >> Analysis Reports.

Step 2: Click the icon to launch the analysis report.

The tree node diagram for location of interest is organized in the hierarchy of Country >> Province >> District/Metro >> Facility. If a province is chosen, the result will show data for the whole province. Within the results, the authority user can expand to show the breakdown for individual districts/metros (when applicable) that fall within the province. The authority user can take it one step further and expand to show the breakdown for individual facilities (when applicable) within each district/metro.



⊞ The Eastern Cape	83,569,966	83,289,530	83,289,530	83,289,530	83,289,530
⊞ The Free State	1,695,432	1,689,743	1,689,743	1,689,743	1,689,743
⊞ The Western Cape	2,158,496	2,151,253	2,151,253	2,151,253	2,151,253

Substance Code - NOX (Unit: kg)	Industrial	Agriculture and Fishing	Aviation	Land Use and Forestry	Natural Sources
Total (By Category)	**173,539,895**	**86,769,948**	**86,769,948**	**86,769,948**	**86,769,948**
⊞ Gauteng	3,726	1,863	1,863	1,863	1,863
⊞ KwaZulu-Natal	30,304,776	15,152,388	15,152,388	15,152,388	15,152,388
⊞ Limpopo	28,296,997	14,148,499	14,148,499	14,148,499	14,148,499
⊞ North West	42,742,871	21,371,436	21,371,436	21,371,436	21,371,436
⊞ The Eastern Cape	67,559,894	33,779,947	33,779,947	33,779,947	33,779,947
⊞ The Free State	1,935,201	967,600	967,600	967,600	967,600
⊞ The Northern Cape	72,221	36,110	36,110	36,110	36,110
⊞ The Western Cape	2,624,209	1,312,105	1,312,105	1,312,105	1,312,105

Substance Code - PM10 (Unit: kg)	Industrial	Agriculture and Fishing	Aviation	Land Use and Forestry	Natural Sources
Total (By Category)	**246,573**	**123,286**	**123,286**	**123,286**	**123,286**
⊞ Gauteng	12,753	6,377	6,377	6,377	6,377
⊞ KwaZulu-Natal	31	16	16	16	16

Figure 11.1 GHG Data Analysis Report

8.5.2 Emission Search by GIS

The Emission Search by GIS module allows users to view points of interest on the map by search of pollutant, inventory year, area of interest, and sector. Once the search is conducted, drop pins will appear based on the specified area of interest by the user. The drop pins will be color coded based on the value of the emission. The gradient of the shading will change from green (low emission value) to red (large emission value). The user can view additional source information by clicking on the individual drop pins.

Steps for launching the Emission Search by GIS are outlined below.

Step 1: Navigate to Source Management >> Emission Results by GIS.

Step 2: Click the **"Search Emission Results by GIS"** link to launch the GIS Viewer.

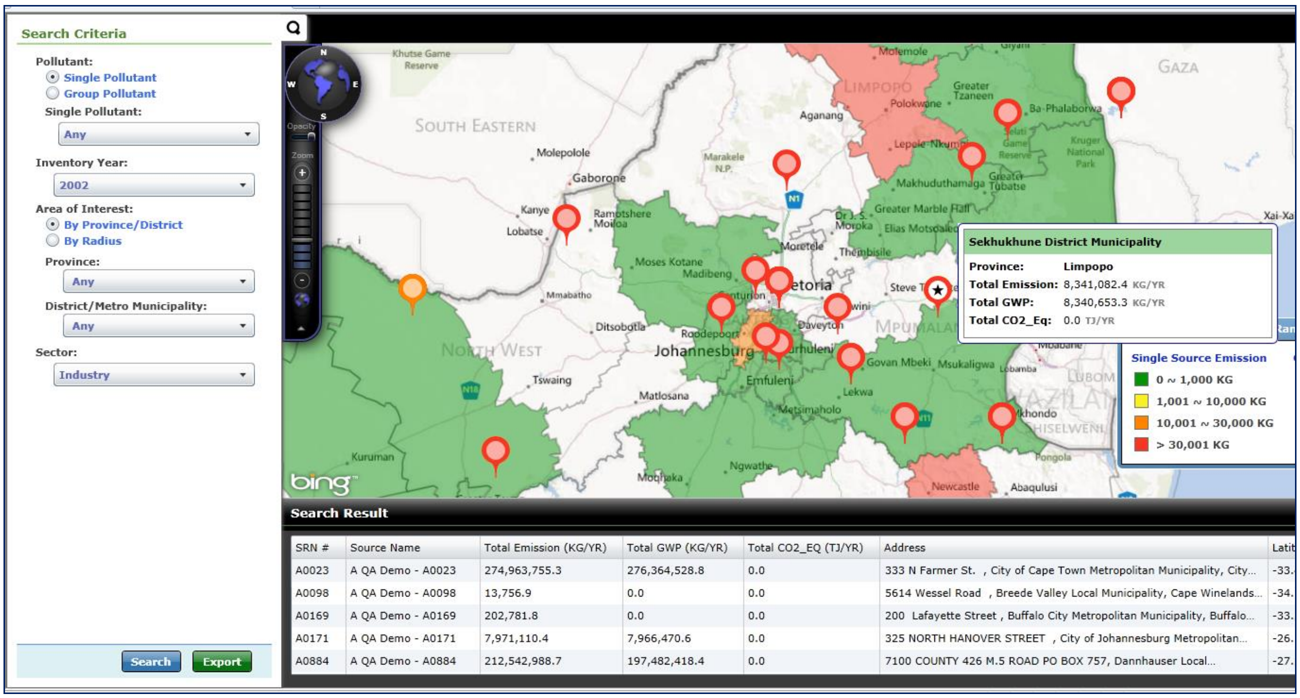


Figure 11.2 Emission Search by GIS

9 Additional SAAELIP Functionalities

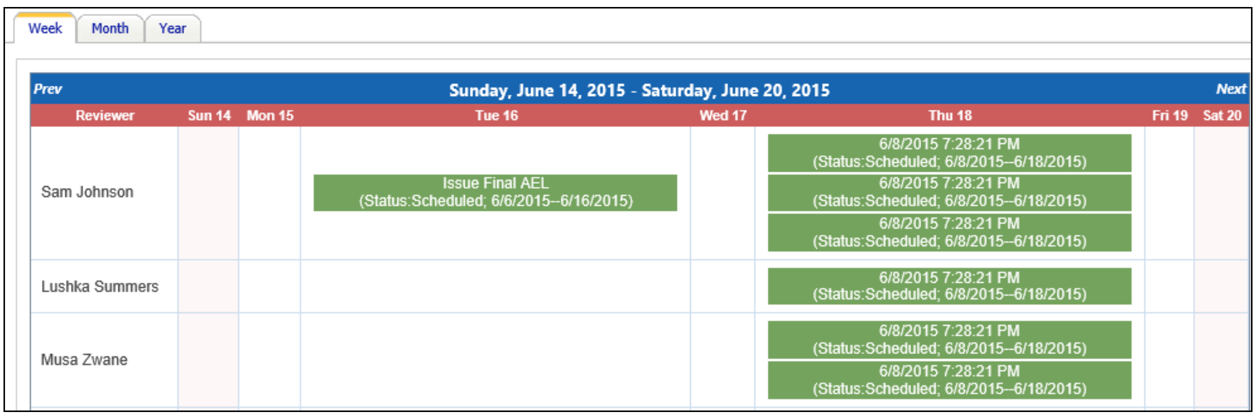
9.1 *Calendar*

The calendar provides a hyperlink so the user can click on the link to jump to the specified inspection.

9.1.1 Task Calendar

The task calendar allows the user to see what tasks are assigned to them and can view them by the week, month, or year. The tasks are highlighted in green and will display the date scheduled, the status, and the duration. If the tasks are viewed by month, the hyperlink will direct the user to my task rather than the task itself.

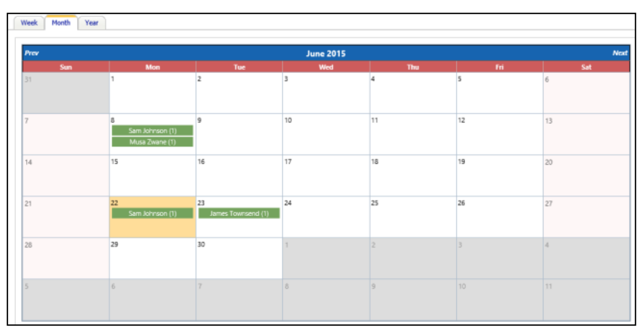
Task Calendar Month View



Task Calendar Week View

9.1.2 Inspection Calendar

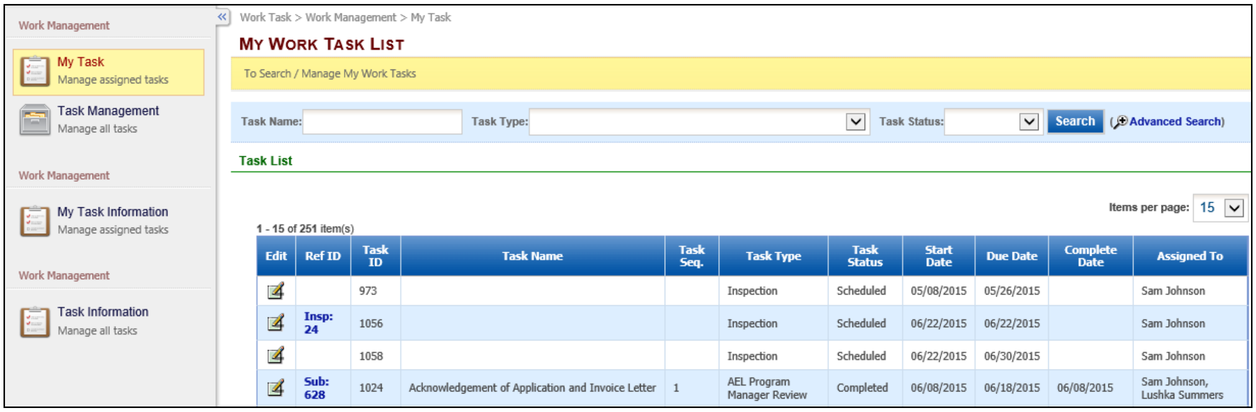
The inspection calendar display can be viewed by day, week, or the year. Any scheduled inspection that falls in the date range of the view will be displayed in green.



Inspection Calendar Month View

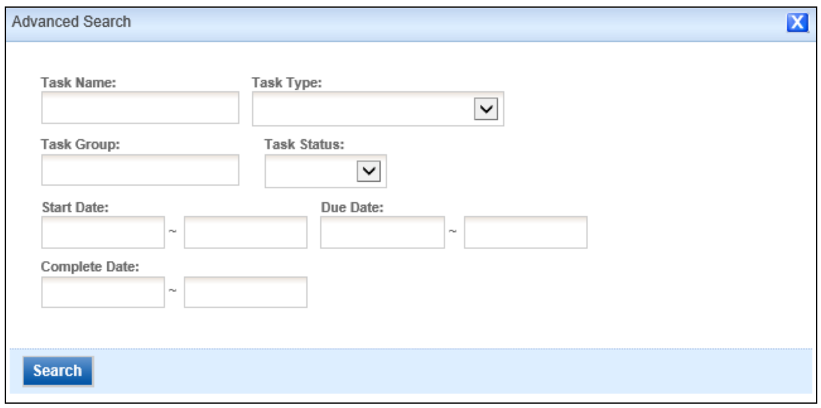
9.2 *Work Task Management*

'Work Task Management' is a powerful tool that can modify work task assignments in several different ways. The basic search bar allows the user to search by task name, task type, or filter by status. If additional parameters are needed, the user can use the 'Advance Search' option to view additional parameters.



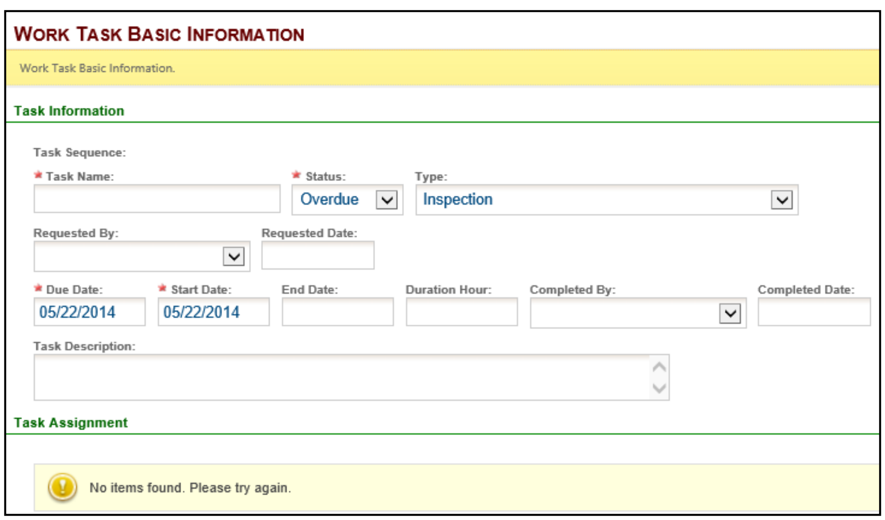
Task Management Grid View

The advance search lets the user specify the date range – start, due, and complete date.



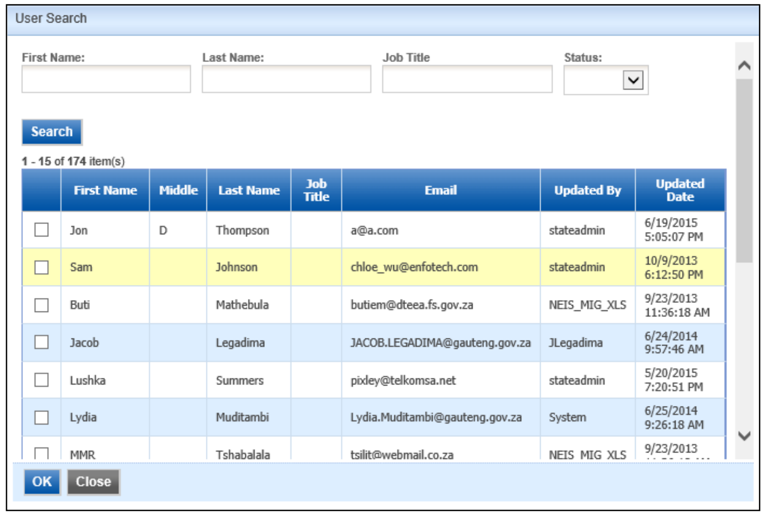
Task Management Advanced Search

By selecting the icon next to the work task, the user will navigate to the task information menu. In this menu, the user can specify the task name, change the status, due/start date, and type of work item. The user can add additional information in order to track, modify, or simply add a task description.



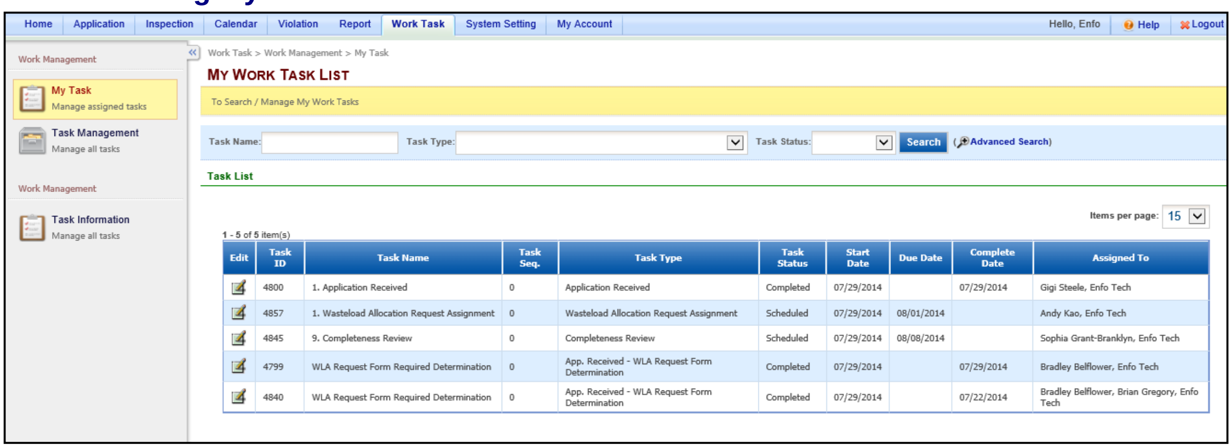
Work Task Detail Menu

By clicking the **Associate Users** button, the user can now assign the work task to whomever they want. Multiple users can be selected by checking the checkbox next to the desired users.



Task Assignment Selection Tool

9.2.1 Tracking My Task



My Task Grid View

10 Other Helpful Information

10.1 *Submittal Status Descriptions*

SAAELIP Submittal Status	Submittal Status Description
Admin Review	The submittal is ready for the authority to start the review process.
Canceled	The submittal was requested and approved for cancelation. The submittal can no longer be altered and all work flow halted.
Revision	The submittal was requested and approved for revision. The submittal can no longer be altered and all work flow is halted. A new submittal was created with the data from the revised submittal.
License Issued	The license has been issued to the applicant.
Technical Review	The draft AEL will be reviewed and revisions will be made based on the review comments.

SAAELIP Submittal Status	Submittal Status Description
Tech Review Completed	All attachments have been submitted, fee has been paid in full, and submittal form is complete; Submission ID remains the same when status is updated.
Public Comment Period Open	The submittal is in the public participation stage and is waiting for the process to complete.
Public Comment Period Closed	The public participation stage is complete.
Approved	Submittal has been approved and license can be issued to the user/facility.
Withdraw	Submittal has been withdrawn by the Applicant; Submission ID remains the same when status is updated, but submission is closed and no further work can be performed on the submission.
Denied	License has been denied due to various reasons; Submission ID remains the same when status is updated.

10.2 *License Status Descriptions*

SAAELIP License Status	License Status Description
Issued	License has been issued.
Termination	License has terminated and is no longer valid.
Extension	The license was given an extension and given a new expiration date.

10.3 *Inspection Status Descriptions*

Status	Description
Out in Compliance	Compliance Inspection completed and site inspection results are in violation of provisions associated to license
Not Ready	Submittal has not been Accepted for SAAELIP to schedule inspection records
In Compliance	Compliance Inspection completed and Site inspection results are in compliance of provisions associated to license
Scheduled	Inspector has accepted to conduct inspection on a specified date and time
In Progress	The inspector can use this status when they are going the inspection process.

11 Appendix

11.1 *AEL Assessment Work Flow*

11.1.1 AEL Assessment Work Flow Overview

#	Work Task	New AEL: EIA + AEL	New AEL: AEL Only	AEL Renewal	AEL Review	AEL Variation	AEL Transfer	AEL Section 22A
1A	Fee Management	☑	☑	☑	☑	☑	☑	☑
1B	Acknowledgement of Application	☑	☑	☑	☑	☑	☑	☑
3	Completeness Audit	☑	☑	☑	☑	☑	☑	☑
4A	Study & Comment on the Scoping Report	☑				☑		
4B	Study & Comment Scoping Report & Plan of Study	☑			☑	☑		☑
5	Study & Comment on EIR & EMPr	☑				☑		☑
6	Review & Comment AIR	☑	Optional	Optional	Optional	Optional		Optional
7	Public Participation Process & Assessment	☑	Compulsory when Step 6 is needed	Compulsory when Step 6 is needed	Compulsory when Step 6 is needed	☑	☑	Compulsory when Step 6 is needed
8A1	Pre Licensing Inspection	☑	☑	☑	☑	☑	☑	☑
8A2	Review Emission Report	☑	☑	☑	☑	☑	☑	☑
8B1	Review Compliance Report			☑	☑	☑		☑
8B2	Prepare Draft AEL	☑	☑	☑	☑	☑	☑	☑
8C1	Comment on Draft AEL	☑	☑	☑	☑	☑	☑	☑
8C2	Revised AEL based on comments	☑	☑	☑	☑	☑	☑	☑
9	Finale Signature	☑	☑	☑	☑	☑	☑	☑
10	Issue Final AEL	☑	☑	☑	☑	☑	☑	☑
Minimum Data Elements Tracked at Each Step		Person, Due Date, Complete Date, Task Status, Comments						

11.1.2 New AEL: EIA + AEL

#	Work Task [1]	Submission Status BEFORE Completion of Task	Submission Status UPON Completion of Task	Upload Document?	Work Group [2]	Default Task Duration (Days)	Issue AEL?
1A	Fee Management	Admin Review Start	Admin Review Start	Yes	Role #1	10	No
1B	Acknowledgement of application	Admin Review Start	Admin Review	Yes	Role #1	10 Parallel[3]	No
2	Completeness Audit	Admin Review	Admin Review Completed	Yes	Role #2	43[4]	No
3	Study & Comment Scoping Report & Plan of Study	Admin Review	Admin Review Completed	Yes	Role #2	43	No
4	Study & Comment on the EIR & EMPr	Admin Review Completed	Admin Review Completed	Yes	Role #2	107[11]	No
5	Review & Comment AIR	Admin Review	Admin Review	Yes	Role #2		No
6	Public Participation Process & Assessment	Admin Review	Admin Review	Yes			No
7A	Pre-Licensing Inspection	Admin Review Completed	Admin Review Completed	Yes	Role #2	107 (Parallel)	No
7B	Review Emission Report	Admin Review	Admin Review Completed	Yes	Role #2	10 (Parallel)	No
8	Prepare Draft AEL	Admin Review Completed	Technical Review	Yes	Role #2	20 (after issue of EA)	Yes draft
9A	Comment on Draft AEL	Technical Review	Tech Review Completed	Yes	Role #3	10 (Parallel)	No
9B	Revise Draft AEL based on comments	Technical Review	Tech Review Completed	Yes	Role #2	10 (Parallel)	No

[1] Both AEL Application Status and the current work task will be visible to Applicant for review status tracking

[2] Specific Work Groups TBD by DEA. Roles Identified here are for organizational purposes only. Roles could be clerks, inspectors, engineers, etc.

[3] "Parallel" indicates that this item must be completed in parallel with the item above.

[4] After receipt of triggering documentation.

#	Work Task [1]	Submission Status BEFORE Completion of Task	Submission Status UPON Completion of Task	Upload Document?	Work Group [2]	Default Task Duration (Days)	Issue AEL?
10	Final Signature	Tech Review Completed	Approved	Yes (scan signed copy)	Role #4	10	No
11	Issue Final AEL	Approved	License Issued	Yes	Role #4	10	Yes

11.1.3 New AEL: AEL Only

#	Work Task [5]	Submission Status BEFORE Completion of Task	Submission Status UPON Completion of Task	Upload Document?	Work Group [6]	Default Task Duration (Days)	Issue AEL?
1A	Fee Management	Admin Review Start	Admin Review Start	Yes	Role #1	10	No
1B	Acknowledgement of application	Admin Review Start	Admin Review	Yes	Role #1	10 Parallel[7]	No
2	Completeness Audit	Admin Review	Admin Review Completed	Yes	Role #2	43[8]	No
5	Review & Comment AIR	Admin Review	Admin Review	Yes	Role #2		No
6	Public Participation Process & Assessment	Admin Review	Admin Review	Yes			No
7A	Pre-Licensing Inspection	Admin Review Completed	Admin Review Completed	Yes	Role #2	107 (Parallel)	No
7B	Review Emission Report	Admin Review	Admin Review Completed	Yes	Role #2	10 (Parallel)	No
8	Prepare Draft AEL	Admin Review Completed	Technical Review	Yes	Role #2	20 (after issue of EA)	Yes draft
9A	Comment on Draft	Technical Review	Tech Review	Yes	Role #3	10	No

[5] Both AEL Application Status and the current work task will be visible to Applicant for review status tracking

[6] Specific Work Groups TBD by DEA. Roles Identified here are for organizational purposes only. Roles could be clerks, inspectors, engineers, etc.

[7] "Parallel" indicates that this item must be completed in parallel with the item above.

[8] After receipt of triggering documentation.

#	Work Task [5]	Submission Status BEFORE Completion of Task	Submission Status UPON Completion of Task	Upload Document?	Work Group [6]	Default Task Duration (Days)	Issue AEL?
	AEL		Completed			(Parallel)	
9B	Revise Draft AEL based on comments	Technical Review	Tech Review Completed	Yes	Role #2	10 (Parallel)	No
10	Final Signature	Tech Review Completed	Approved	Yes (scan signed copy)	Role #4	10	No
11	Issue Final AEL	Approved	License Issued	Yes	Role #4	10	Yes

11.1.4 AEL Renewal

#	Work Task [9]	Submission Status BEFORE Completion of Task	Submission Status UPON Completion of Task	Upload Document?	Work Group [10]	Default Task Duration (Days)	Issue AEL?
1A	Fee Management	Admin Review Start	Admin Review Start	Yes	Role #1	10	No
1B	Acknowledgement of application	Admin Review Start	Admin Review	Yes	Role #1	10 Parallel[11]	No
2	Completeness Audit	Admin Review	Admin Review Completed	Yes	Role #2	43[12]	No
5	Review & Comment AIR	Admin Review	Admin Review	Yes	Role #2		No
6	Public Participation Process & Assessment	Admin Review	Admin Review	Yes			No
7A	Pre-Licensing Inspection	Admin Review Completed	Admin Review Completed	Yes	Role #2	107 (Parallel)	No
7B	Review Emission	Admin Review	Admin Review	Yes	Role #2	10	No

[9] Both AEL Application Status and the current work task will be visible to Applicant for review status tracking

[10] Specific Work Groups TBD by DEA. Roles Identified here are for organizational purposes only. Roles could be clerks, inspectors, engineers, etc.

[11] "Parallel" indicates that this item must be completed in parallel with the item above.

[12] After receipt of triggering documentation.

#	Work Task [9]	Submission Status BEFORE Completion of Task	Submission Status UPON Completion of Task	Upload Document?	Work Group [10]	Default Task Duration (Days)	Issue AEL?
	Report		Completed			(Parallel)	
7C	Review Compliance Report	Admin Review	Admin Review Completed	Yes	Role #2		No
8	Prepare Draft AEL	Admin Review Completed	Technical Review	Yes	Role #2	20 (after issue of EA)	Yes draft
9A	Comment on Draft AEL	Technical Review	Tech Review Completed	Yes	Role #3	10 (Parallel)	No
9B	Revise Draft AEL based on comments	Technical Review	Tech Review Completed	Yes	Role #2	10 (Parallel)	No
10	Final Signature	Tech Review Completed	Approved	Yes (scan signed copy)	Role #4	10	No
11	Issue Final AEL	Approved	License Issued	Yes	Role #4	10	Yes

11.1.5 AEL Review

#	Work Task [13]	Submission Status BEFORE Completion of Task	Submission Status UPON Completion of Task	Upload Document?	Work Group [14]	Default Task Duration (Days)	Issue AEL?
1A	Fee Management	Admin Review Start	Admin Review Start	Yes	Role #1	10	No
1B	Acknowledgement of application	Admin Review Start	Admin Review	Yes	Role #1	10 Parallel[15]	No
2	Completeness Audit	Admin Review	Admin Review Completed	Yes	Role #2	43[16]	No
3	Study & Comment	Admin Review	Admin Review	Yes	Role #2	43	No

[13] Both AEL Application Status and the current work task will be visible to Applicant for review status tracking

[14] Specific Work Groups TBD by DEA. Roles Identified here are for organizational purposes only. Roles could be clerks, inspectors, engineers, etc.

[15] "Parallel" indicates that this item must be completed in parallel with the item above.

[16] After receipt of triggering documentation.

#	Work Task [13]	Submission Status BEFORE Completion of Task	Submission Status UPON Completion of Task	Upload Document?	Work Group [14]	Default Task Duration (Days)	Issue AEL?
	Scoping Report & Plan of Study		Completed				
5	Review & Comment AIR	Admin Review	Admin Review	Yes	Role #2		No
6	Public Participation Process & Assessment	Admin Review	Admin Review	Yes			No
7A	Pre-Licensing Inspection	Admin Review Completed	Admin Review Completed	Yes	Role #2	107 (Parallel)	No
7B	Review Emission Report	Admin Review	Admin Review Completed	Yes	Role #2	10 (Parallel)	No
7C	Review Compliance Report	Admin Review	Admin Review Completed	Yes	Role #2		No
8	Prepare Draft AEL	Admin Review Completed	Technical Review	Yes	Role #2	20 (after issue of EA)	Yes draft
9A	Comment on Draft AEL	Technical Review	Tech Review Completed	Yes	Role #3	10 (Parallel)	No
9B	Revise Draft AEL based on comments	Technical Review	Tech Review Completed	Yes	Role #2	10 (Parallel)	No
10	Final Signature	Tech Review Completed	Approved	Yes (scan signed copy)	Role #4	10	No
11	Issue Final AEL	Approved	License Issued	Yes	Role #4	10	Yes

11.1.6 AEL Transfer

#	Work Task [17]	Submission Status BEFORE Completion of Task	Submission Status UPON Completion of Task	Upload Document?	Work Group [18]	Default Task Duration (Days)	Issue AEL?

[17] Both AEL Application Status and the current work task will be visible to Applicant for review status tracking

[18] Specific Work Groups TBD by DEA. Roles Identified here are for organizational purposes only. Roles could be clerks, inspectors, engineers, etc.

#	Work Task [17]	Submission Status BEFORE Completion of Task	Submission Status UPON Completion of Task	Upload Document?	Work Group [18]	Default Task Duration (Days)	Issue AEL?
1A	Fee Management	Admin Review Start	Admin Review Start	Yes	Role #1	10	No
1B	Acknowledgement of application	Admin Review Start	Admin Review	Yes	Role #1	10 Parallel[19]	No
2	Completeness Audit	Admin Review	Admin Review Completed	Yes	Role #2	43[20]	No
6	Public Participation Process & Assessment	Admin Review	Admin Review	Yes			No
7A	Pre-Licensing Inspection	Admin Review Completed	Admin Review Completed	Yes	Role #2	107 (Parallel)	No
7B	Review Emission Report	Admin Review	Admin Review Completed	Yes	Role #2	10 (Parallel)	No
8	Prepare Draft AEL	Admin Review Completed	Technical Review	Yes	Role #2	20 (after issue of EA)	Yes draft
9A	Comment on Draft AEL	Technical Review	Tech Review Completed	Yes	Role #3	10 (Parallel)	No
9B	Revise Draft AEL based on comments	Technical Review	Tech Review Completed	Yes	Role #2	10 (Parallel)	No
10	Final Signature	Tech Review Completed	Approved	Yes (scan signed copy)	Role #4	10	No
11	Issue Final AEL	Approved	License Issued	Yes	Role #4	10	Yes

[19] "Parallel" indicates that this item must be completed in parallel with the item above.

[20] After receipt of triggering documentation.

11.1.7 AEL Variation

#	Work Task [21]	Submission Status BEFORE Completion of Task	Submission Status UPON Completion of Task	Upload Document?	Work Group [22]	Default Task Duration (Days)	Issue AEL?
1A	Fee Management	Admin Review Start	Admin Review Start	Yes	Role #1	10	No
1B	Acknowledgement of application	Admin Review Start	Admin Review	Yes	Role #1	10 Parallel[23]	No
2	Completeness Audit	Admin Review	Admin Review Completed	Yes	Role #2	43[24]	No
3	Study & Comment Scoping Report & Plan of Study	Admin Review	Admin Review Completed	Yes	Role #2	43	No
4	Study & Comment on the EIR & EMPr	Admin Review Completed	Admin Review Completed	Yes	Role #2	107[11]	No
5	Review & Comment AIR	Admin Review	Admin Review	Yes	Role #2		No
6	Public Participation Process & Assessment	Admin Review	Admin Review	Yes			No
7A	Pre-Licensing Inspection	Admin Review Completed	Admin Review Completed	Yes	Role #2	107 (Parallel)	No
7B	Review Emission Report	Admin Review	Admin Review Completed	Yes	Role #2	10 (Parallel)	No
7C	Review Compliance Report	Admin Review	Admin Review Completed	Yes	Role #2		No
8	Prepare Draft AEL	Admin Review Completed	Technical Review	Yes	Role #2	20 (after issue of EA)	Yes draft
9A	Comment on Draft AEL	Technical Review	Tech Review Completed	Yes	Role #3	10 (Parallel)	No

[21] Both AEL Application Status and the current work task will be visible to Applicant for review status tracking

[22] Specific Work Groups TBD by DEA. Roles Identified here are for organizational purposes only. Roles could be clerks, inspectors, engineers, etc.

[23] “Parallel” indicates that this item must be completed in parallel with the item above.

[24] After receipt of triggering documentation.

#	Work Task [21]	Submission Status BEFORE Completion of Task	Submission Status UPON Completion of Task	Upload Document?	Work Group [22]	Default Task Duration (Days)	Issue AEL?
9B	Revise Draft AEL based on comments	Technical Review	Tech Review Completed	Yes	Role #2	10 (Parallel)	No
10	Final Signature	Tech Review Completed	Approved	Yes (scan signed copy)	Role #4	10	No
11	Issue Final AEL	Approved	License Issued	Yes	Role #4	10	Yes

11.1.8 AEL Section 22A

#	Work Task [25]	Submission Status BEFORE Completion of Task	Submission Status UPON Completion of Task	Upload Document?	Work Group [26]	Default Task Duration (Days)	Issue AEL?
1A	Fee Management	Admin Review Start	Admin Review Start	Yes	Role #1	10	No
1B	Acknowledgement of application	Admin Review Start	Admin Review	Yes	Role #1	10 Parallel[27]	No
2	Completeness Audit	Admin Review	Admin Review Completed	Yes	Role #2	43[28]	No
3	Study & Comment Scoping Report & Plan of Study	Admin Review	Admin Review Completed	Yes	Role #2	43	No
4	Study & Comment on the EIR & EMPr	Admin Review Completed	Admin Review Completed	Yes	Role #2	107[11]	No
5	Review & Comment AIR	Admin Review	Admin Review	Yes	Role #2		No
6	Public Participation	Admin Review	Admin Review	Yes			No

[25] Both AEL Application Status and the current work task will be visible to Applicant for review status tracking

[26] Specific Work Groups TBD by DEA. Roles Identified here are for organizational purposes only. Roles could be clerks, inspectors, engineers, etc.

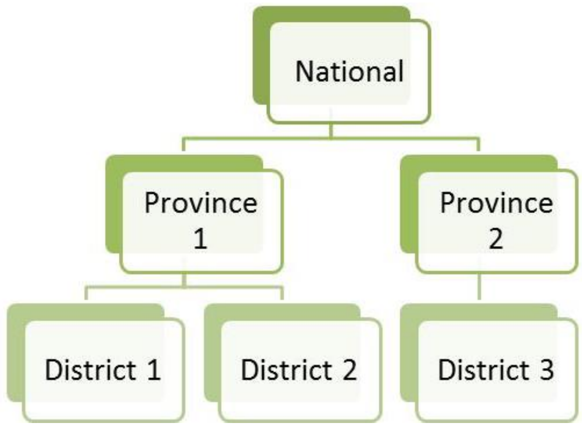
[27] "Parallel" indicates that this item must be completed in parallel with the item above.

[28] After receipt of triggering documentation.

#	Work Task [25]	Submission Status BEFORE Completion of Task	Submission Status UPON Completion of Task	Upload Document?	Work Group [26]	Default Task Duration (Days)	Issue AEL?
	Process & Assessment						
7A	Pre-Licensing Inspection	Admin Review Completed	Admin Review Completed	Yes	Role #2	107 (Parallel)	No
7B	Review Emission Report	Admin Review	Admin Review Completed	Yes	Role #2	10 (Parallel)	No
7C	Review Compliance Report	Admin Review	Admin Review Completed	Yes	Role #2		No
8	Prepare Draft AEL	Admin Review Completed	Technical Review	Yes	Role #2	20 (after issue of EA)	Yes draft
9A	Comment on Draft AEL	Technical Review	Tech Review Completed	Yes	Role #3	10 (Parallel)	No
9B	Revise Draft AEL based on comments	Technical Review	Tech Review Completed	Yes	Role #2	10 (Parallel)	No
10	Final Signature	Tech Review Completed	Approved	Yes (scan signed copy)	Role #4	10	No
11	Issue Final AEL	Approved	License Issued	Yes	Role #4	10	Yes

11.2 *Group and Role Relationship*

All User's within the Authority portal must be assigned not only to a work group but also a role. This gives the user access privileges to different screens and views that are applicable to their work responsibilities.



11.2.1 Work Groups

Work groups are used to determine the User's access privileges to data. The User can be assigned under the following work groups:

- National: The User will be able to view nation-wide AEL applications. A National User will be able to assign a new user to any work group.
- Province: The User will only be able to view AEL applications that are within the jurisdiction of their assigned province. A Provincial User will only be able to assign a new User to that particular province group or a district or metropolitan municipality.
- District/Metropolitan Municipality: The User in this group will only be able to view AEL applications that are within the jurisdiction of their assigned district or metropolitan municipality. A District/Metropolitan Municipality User will only be able to assign a new user to that particular district/metro group.

ID	Work Group Levels	
1	National	National
2	Province	The Eastern Cape
3		The Free State
4		Gauteng
5		KwaZulu-Natal
6		Mpumalanga
7		North West
8		The Northern Cape
9		Limpopo
10		The Western Cape
11	District/Metropolitan Municipality	Alfred Nzo
12		Amathole
13		Buffalo City Metropolitan
14		Cacadu
15		Chris Hani
16		Joe Gqabi

ID	Work Group Levels	
17		Nelson Mandela Bay Metropolitan
18		O.R. Tambo
19		Fezile Dabi
20		Lejweleputswa
21		Mangaung Metropolitan
22		Thabo Mofutsanyane
23		Xhariep
24		City of Johannesburg Metropolitan
25		City of Tshwane Metropolitan
26		Ekurhuleni Metropolitan
27		Sedibeng
28		West Rand
29		Amajuba
30		eThekwini Metropolitan
31		iLembe
32		Sisonke
33		Ugu
34		UMgungundlovu
35		Umzinyathi
36		Uthukela
37		Uthungulu
38		Zululand
39		Umkhanyakude
40		Ehlanzeni
41		Gert Sibande
42		Nkangala
43		Bojanala
44		Dr Kenneth Kaunda
45		Dr Ruth Segomotsi Mompati
46		Ngaka Modiri Molema
47		Frances Baard
48		John Taolo Gaetsewe
49		Namakwa
50		Pixley Ka Seme
51		Zwelentlanga Fatman Mgcawu
52		Capricorn
53		Greater Sekhukhune
54		Mopani
55		Vhembe
56		Waterberg
57		Cape Winelands
58		Central Karoo
59		City of Cape Town Metropolitan
60		Eden
61		Overberg
62		West Coast

11.2.2 Roles

A User is assigned roles in order to determine which tasks they will be able to complete using the SAAELIP system. Please refer to section 7.1 for a more detailed view on the workflows for different roles.

ID	Role Name	Goals, Motives, and Usage Patterns
Authority Actors		
1	Portal Super Administrator	▪ Create user accounts in the Portal ▪ Manage user access to SNAEL or NAEIS system(s)
2	SNAEL / NAEIS Super Administrator	▪ Manage security and permission setup ▪ Create and maintain system reference data, and templates ▪ Manage system configurations
3	National AQO	▪ Create National Authority users (Clerks, Inspector, Engineer) ▪ Create Provincial and District/Metro Authority users (AQO, Clerks, Inspector, Engineer) ▪ Review AEL applications that are subject to National jurisdiction ▪ Sign and issue AEL final license ▪ Track performance metrics of processing AEL applications at the National level
4	National Role 1	▪ Determine fee amount and issue invoices to AEL applications that are subject to National jurisdiction ▪ Issue acknowledgement of receiving applications ▪ Conduct completeness audit on AEL applications
5	National Role 2	▪ Perform pre-licensing inspections on AEL applications that are subject to National jurisdiction ▪ Review and comment on reports and documents required by AEL regulations ▪ Prepare draft AEL license ▪ Revise draft AEL based on comments ▪ Schedule and perform inspection on facility being complained
6	National Role 3	▪ Provide comments on draft AEL that are subject to National jurisdiction
7	Provincial AQO	▪ Create Provincial Authority users (Clerks, Inspector, Engineer) ▪ Create District/Metro Authority users (AQO, Clerks, Inspector, Engineer) ▪ Review AEL applications that are subject to its Provincial jurisdiction ▪ Sign and issue AEL final license ▪ Track performance metrics of processing AEL applications at the Provincial level
8	Provincial Role 1	▪ Determine fee amount and issue invoices to AEL applications that are subject to Provincial jurisdiction ▪ Issue acknowledgement of receiving applications ▪ Conduct completeness audit on AEL applications
9	Provincial Role 2	▪ Perform pre-licensing inspections on AEL applications that are subject

ID	Role Name	Goals, Motives, and Usage Patterns
		to Provincial jurisdiction ▪ Review and comment on reports and documents required by AEL regulations ▪ Prepare draft AEL license ▪ Revise draft AEL based on comments ▪ Schedule and perform inspection on facility being complained
10	Provincial Role 3	▪ Provide comments on draft AEL that are subject to Provincial jurisdiction
11	District/Metro AQO	▪ Create District/Metro Authority users (Clerks, Inspector, Engineer) ▪ Review AEL applications that are subject to its jurisdiction ▪ Sign and issue AEL final license ▪ Track performance metrics of processing AEL applications at the Provincial level
12	District/Metro Role 1	▪ Determine fee amount and issue invoices to AEL applications that are subject to its jurisdiction ▪ Issue acknowledgement of receiving applications ▪ Conduct completeness audit on AEL applications
13	District/Metro Role 2	▪ Perform pre-licensing inspections on AEL applications that are subject to its jurisdiction ▪ Review and comment on reports and documents required by AEL regulations ▪ Prepare draft AEL license ▪ Revise draft AEL based on comments ▪ Schedule and perform inspection on facility being complained
14	District/Metro Role 3	▪ Provide comments on draft AEL that are subject to its jurisdiction
Facility Actors		
15	ACO	▪ Associate Consultant(s) to prepare AEL application for relevant facilities ▪ Check and review completeness of AEL application ▪ Certify and submit AEL application ▪ Request to revise or withdraw submitted AEL application ▪ Track review statuses of submitted AEL applications ▪ Renew, amend, transfer or terminate AEL license for relevant facilities
16	ECO	▪ Same as above
17	Consultant	▪ Prepare AEL application for relevant facilities ▪ Initiate AEL revision, renewal, transfer and variation processes ▪ Check and review completeness of AEL application
Public Actors		
18	General Public	▪ No system account needed ▪ Search for AEL application submitted in SNAEL system

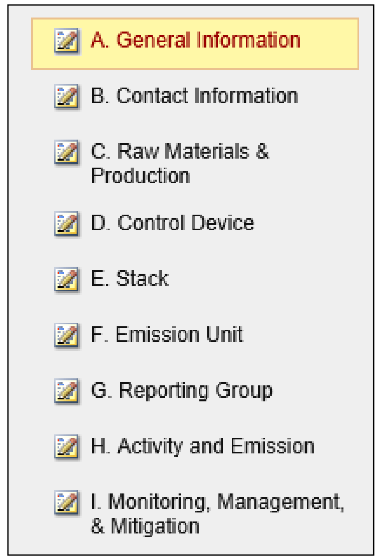
ID	Role Name	Goals, Motives, and Usage Patterns
		▪ Search for AEL licenses issued in SNAEL system

11.3 *Creating and Submitting Applications*

11.3.1 AEL Application

The main purpose for AEL application is to initiate the first step for a user to apply, renew, and amend air emission license. An Authority can enter information for a facility's AEL if they have received a paper submission from the facility. The AEL Application process for the Authority will be very similar to the steps followed by the Facility if they had applied through SAAELIP. SAAELIP has broken down the AEL Application Form into multiple sections. The sections are described as the following:

- General Information: This section contains the basic facility information such as rules/regulations and pollutants that are associated with the facility.
- Contact Information: This section allows the user to input contacts for the facility.
- Raw Materials & Production: This section allows the user to enter details about raw materials that are used that may result in a change in air emission output.
- Control Device: This section details the control units relevant to the license and allows the user to select the associated pollutants.
- Stack: This section lets the user define in the detail the release points associated with the application.
- Emission Unit: The emission source lists the emission and allows the user to associate the release point, control device, and rule.
- Reporting Group: This section allows the user to define if testing and monitoring are needed for the group and define the group by type.
- Emission and Activity: Emission and activity lets the user describe the emission path group in further detail.
- Monitoring, Management, & Mitigation: Monitoring defines the process in which each emission source is handled.



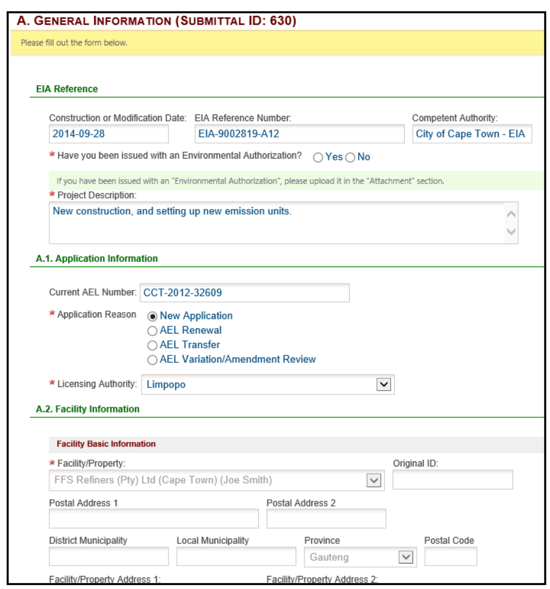
AEL Navigation Wizard

11.3.1.1 General Information

In this section, the standard AEL application will be used as the base and does not completely reflect how all other types are handled.

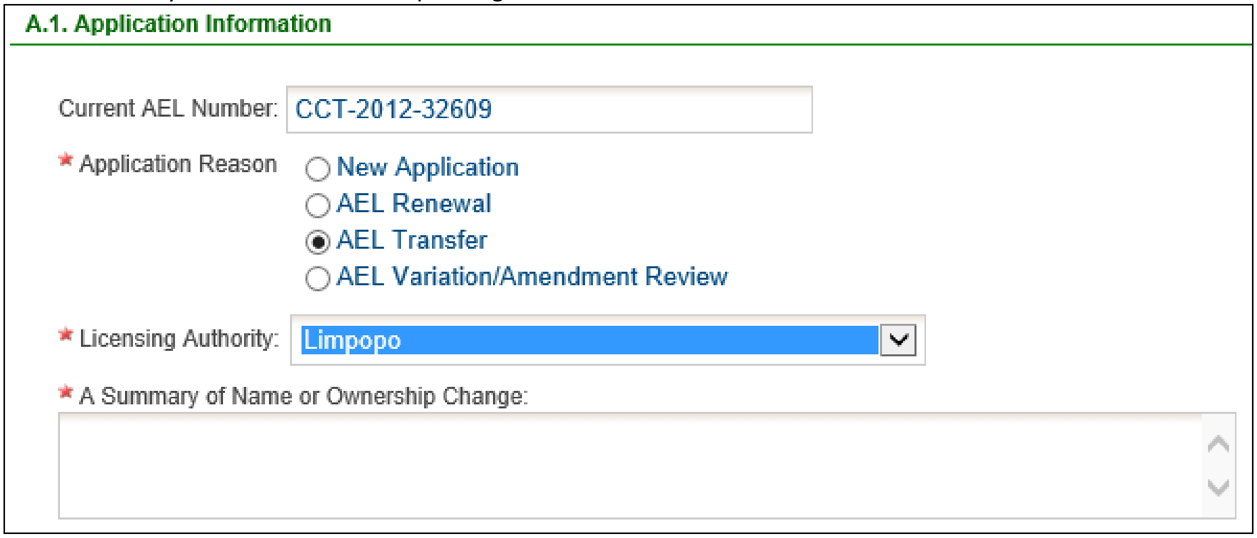
Any fields that contain a * as an icon is required to be filled or the system will generate a validation error.

In 'General Information', the user will begin by describing the project followed by selecting the application type and selecting the facility.



AEL General Information

By selecting the different application reasons, the form will alter based on the application needs. In the instance of selecting 'AEL Transfer", the previous description box was altered to a drop down menu for 'Licensing Authority' and a 'Summary of Name or Ownership Change' field box.


A.1. Application Information

Current AEL Number: CCT-2012-32609

* Application Reason
- New Application
- AEL Renewal
- AEL Transfer
- AEL Variation/Amendment Review

* Licensing Authority: Limpopo

* A Summary of Name or Ownership Change:

AEL Application Reason Selection

The next section provides additional required fields for the application to be completed. Selecting the right SIC Code is extremely important since this will determine the unit that will receive the application.


* Does your facility have less than 100 employees? Yes No

If "To be initiated" is selected, then additional requirements will be added to the attachment section at the end of the application.

Does your facility have a complaint's register? Yes No To be initiated

SIC Code: **10 (Description: Manufacturing of food products)**

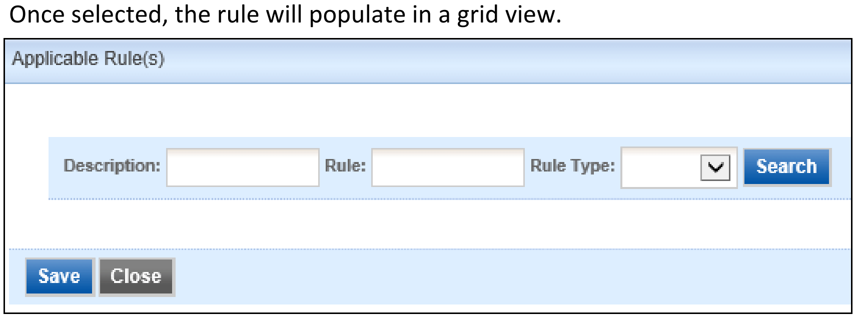
Search SIC

* Facility Description:

Petrochemical sector, pulp and paper sector or platinum industry

AEL Application Description

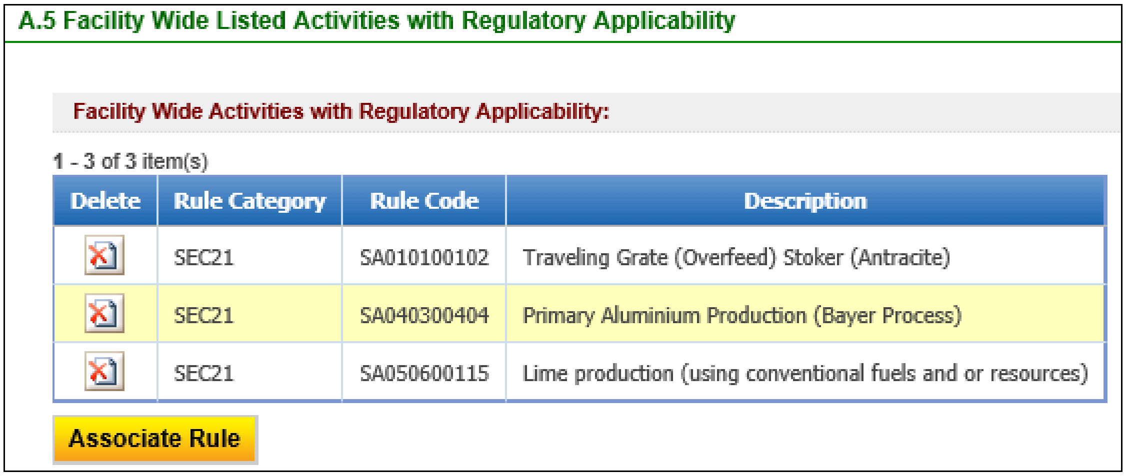
The applicable regulation and the pollutant section play an intricate part of the application process. The regulations have been designed by using a search tool. In this utility, the user can search by description, rule, or filter by rule type. Once selected, the rule will populate in a grid view.


Applicable Rule(s)

Description: Rule: Rule Type: Search

Save Close

AEL Rule Search Tool



A.5 Facility Wide Listed Activities with Regulatory Applicability

Facility Wide Activities with Regulatory Applicability:

1 - 3 of 3 item(s)

Delete	Rule Category	Rule Code	Description
	SEC21	SA010100102	Traveling Grate (Overfeed) Stoker (Antracite)
	SEC21	SA040300404	Primary Aluminium Production (Bayer Process)
	SEC21	SA050600115	Lime production (using conventional fuels and or resources)

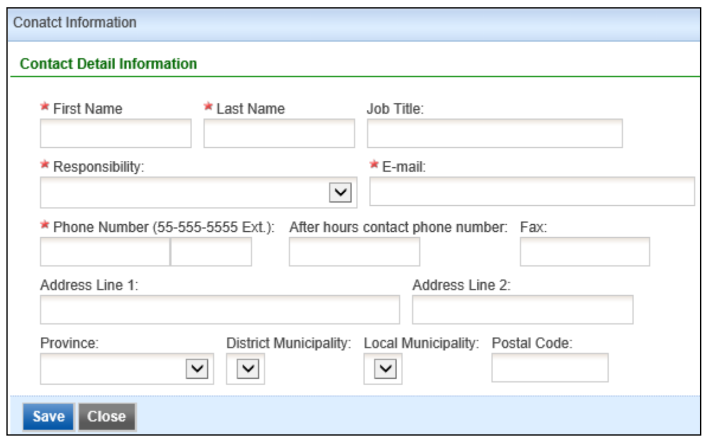
Associate Rule

AEL Rule Grid view

At this stage, the user should click either the save button or the next button to prevent loss of information.

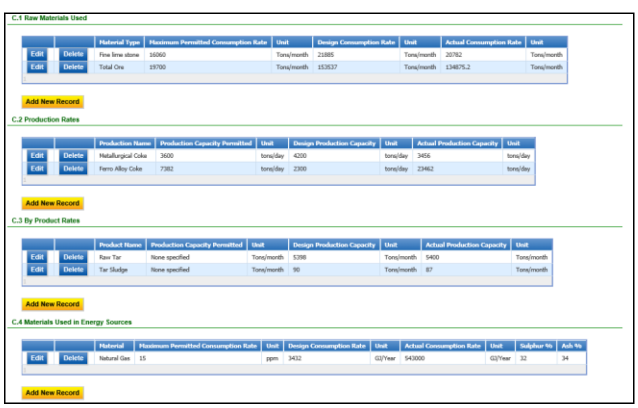
11.3.1.2 Contact

After the next button is clicked, the user is brought to the 'Contact Information' section of the application. In this section the user can select the contact individual(s) and declare their responsibility.



11.3.1.3 Raw Materials & Production

This section allows the user to enter details about raw materials that are used that may result in a change in air emission output. The User can click the "Add New Record" button to add different raw materials or production information to the License.



C.1 Raw Materials Used

		Material Type	Maximum Permitted Consumption Rate	Unit	Design Consumption Rate	Unit	Actual Consumption Rate	Unit
Edit	Delete	Fine lime stone	16060	Tons/month	21885	Tons/month	20782	Tons/month
Edit	Delete	Total Ore	19700	Tons/month	153537	Tons/month	134875.2	Tons/month

Add New Record

C.2 Production Rates

		Production Name	Production Capacity Permitted	Unit	Design Production Capacity	Unit	Actual Production Capacity	Unit
Edit	Delete	Metallurgical Coke	3600	tons/day	4200	tons/day	3456	tons/day
Edit	Delete	Ferro Alloy Coke	7382	tons/day	2300	tons/day	23462	tons/day

Add New Record

C.3 By Product Rates

		Product Name	Production Capacity Permitted	Unit	Design Production Capacity	Unit	Actual Production Capacity	Unit
Edit	Delete	Raw Tar	None specified	Tons/month	5398	Tons/month	5400	Tons/month
Edit	Delete	Tar Sludge	None specified	Tons/month	90	Tons/month	87	Tons/month

Add New Record

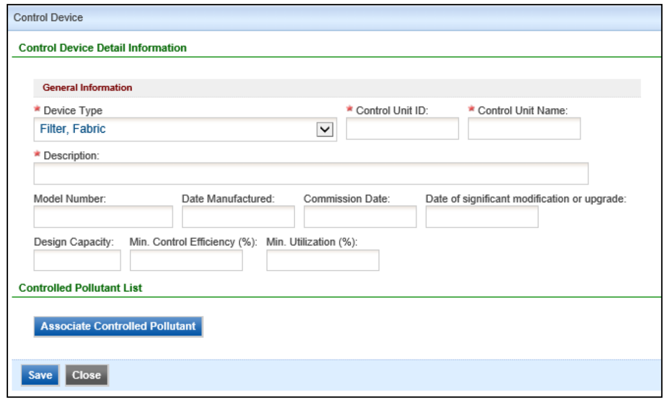
C.4 Materials Used in Energy Sources

		Material	Maximum Permitted Consumption Rate	Unit	Design Consumption Rate	Unit	Actual Consumption Rate	Unit	Sulphur %	Ash %
Edit	Delete	Natural Gas	15	ppm	3432	GJ/Year	543000	GJ/Year	32	34

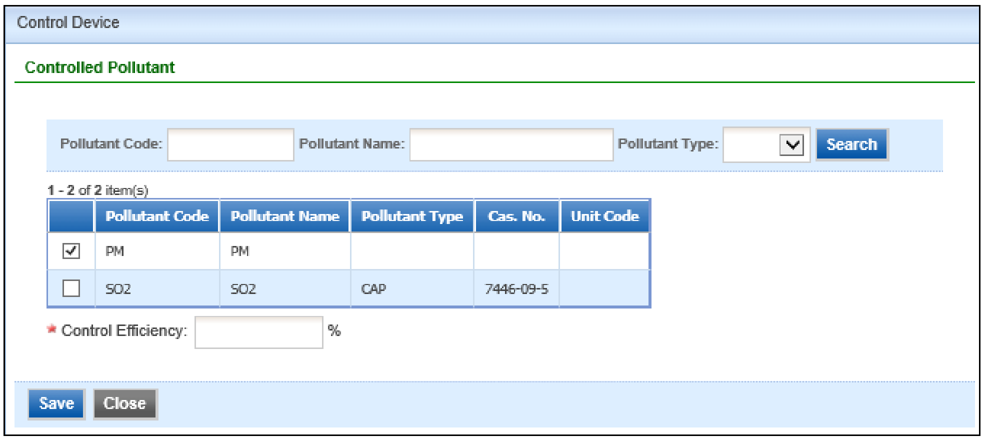
Add New Record

11.3.1.4 Control Device

As the process moves on to the 'Control Device' section, certain guidelines will be explained on how to configure the selected device(s). In this example, filter fabric was selected. The 'Control Unit ID' and 'Control Unit Name' are required to be unique within control devices so that the same ID and name cannot be used twice.



Every single control device requires a pollutant to be associated with them. In this case, the pollutant selected in 'General Information' will be displayed. The user will need to also define the control efficiency of the control device for the particular pollutant(s).



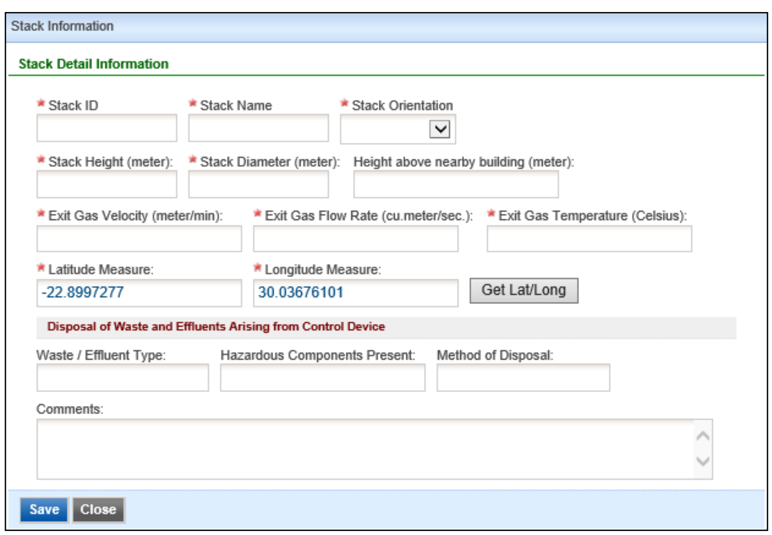
Control Device Pollutant Selection

The user also has the option to 'Batch Update Pollutants'. For control devices with exactly the same pollutants and control efficiency, the user can 'Batch Update Pollutants' and apply the pollutant(s) to all checked control devices instead of having to enter them in one by one.

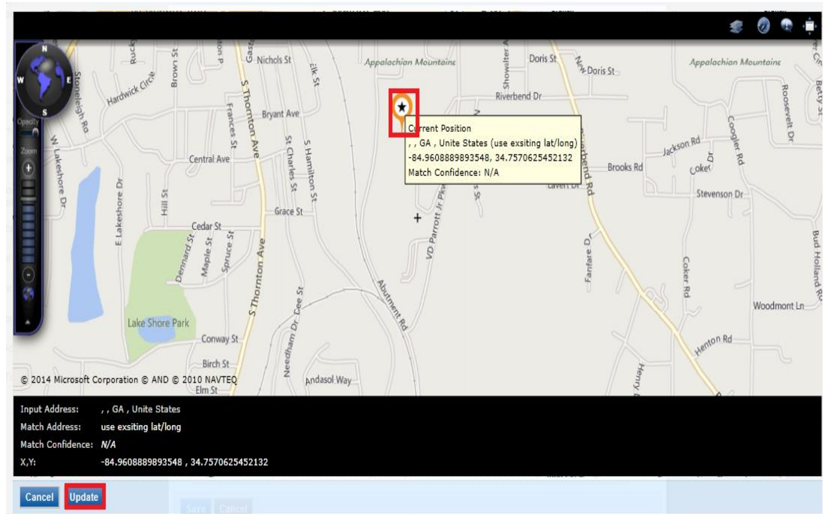
11.3.1.5 Stack

When all the control units have been added, the user should click on the 'next' button to validate and save all entered data. Once verified that all the entered data has passed validation, the user will be brought to the 'Stack' section.

In 'Stack', similar to control devices, the 'Stack ID' and the 'Stack Name' are to be unique within the section.



SAAELIP allow the user to find the latitude and longitude of each stack using a Map interface. The lat./long is defaulted to the location of the facility. By clicking on the 'Get Lat./Long' a map will be displayed and the user will be able to move the cursor to the exact position of the stack.



Stack Mapping Utility

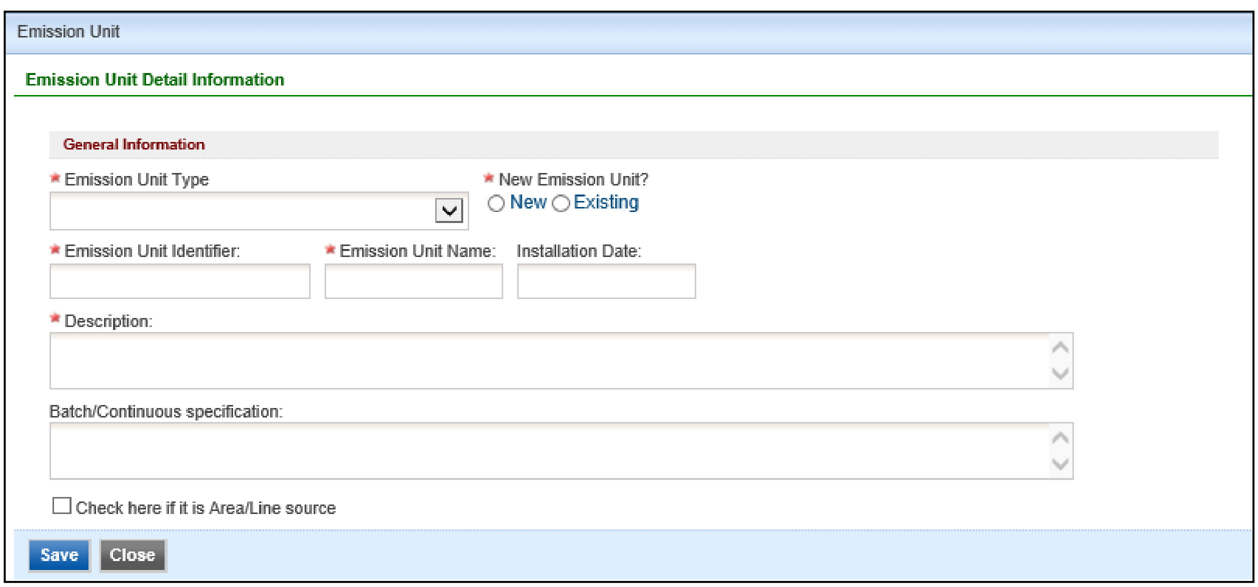
Once the desired position is selected, the user can then click on the 'Update' button to replace the original lat./long fields.

Lat./Long Display

When all desired release points are entered, the user should either click on 'Save' or 'Next' to store the data and move on to 'Emission Unit'.

11.3.1.6 Emission Unit

The 'Emission Unit' is extremely dynamic and similar to the control devices where the form will alter based on the emission unit type selected. Also similar to the control device section, the 'Emission Unit Identifier' and the 'Emission Unit Name' are unique and cannot be repeated.



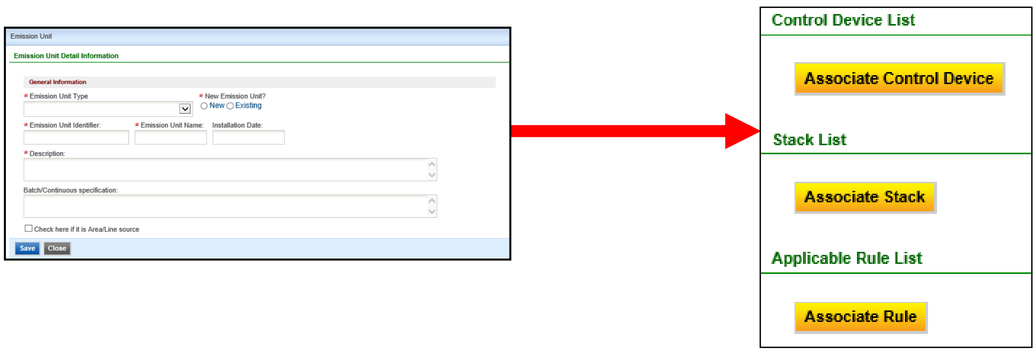
Emission Unit Form

Once the basic emission source information is filled, a new section will open up where the user will need to 'Associate Control Device', 'Associated Stack', and 'Associate Rule'. In some cases, this portion is optional. However, the 'Associated Control Device', 'Associated Release Point', and 'Associated Rule' will always be displayed and the user can associate both the control devices and rules that were entered in the previous sections to the emission unit.

Like control devices, SAAELIP provides features for the user to batch update rules to all checked emission units. The user can also copy a previously entered emission unit by checking on an emission unit and clicking on the 'Copy Emission Unit' button. The user will then be prompted to enter a new emission unit ID and name. Again, the user should save and/or click the 'next' button to store all data before moving on.

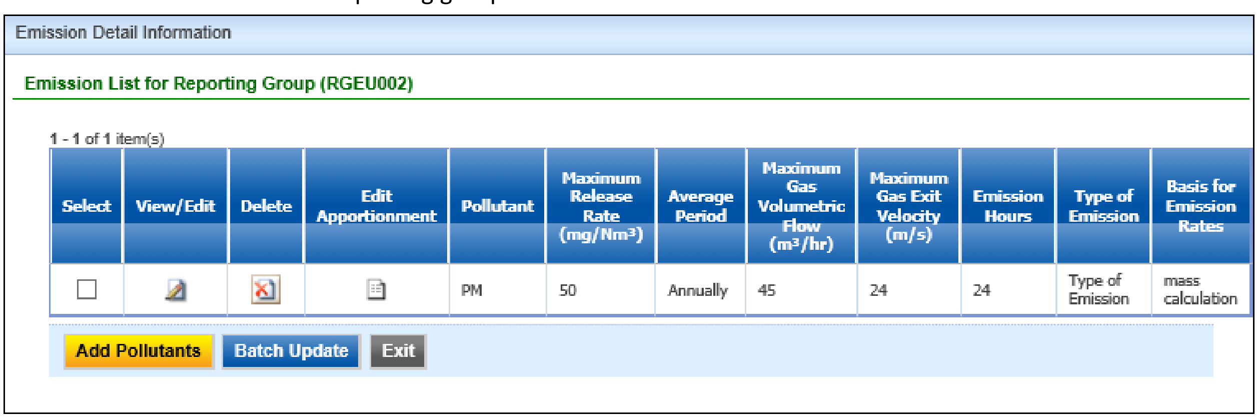
11.3.1.7 Emission Reporting Group

The next section 'Reporting Group' allows the user to associate emission units that have the same emissions reporting.



11.3.1.8 Activity and Emission

Each emissions reporting group in 'Activity and Emissions' can be opened for the user to enter further detail. By clicking on the next to the emissions reporting group, the user is prompted to a screen to select the pollutants associated with the emissions reporting group and fill in additional information.



Emission Detail Information

Emission List for Reporting Group (RGEU002)

1 - 1 of 1 item(s)

Select	View/Edit	Delete	Edit Apportionment	Pollutant	Maximum Release Rate (mg/Nm³)	Average Period	Maximum Gas Volumetric Flow (m³/hr)	Maximum Gas Exit Velocity (m/s)	Emission Hours	Type of Emission	Basis for Emission Rates
				PM	50	Annually	45	24	24	Type of Emission	mass calculation

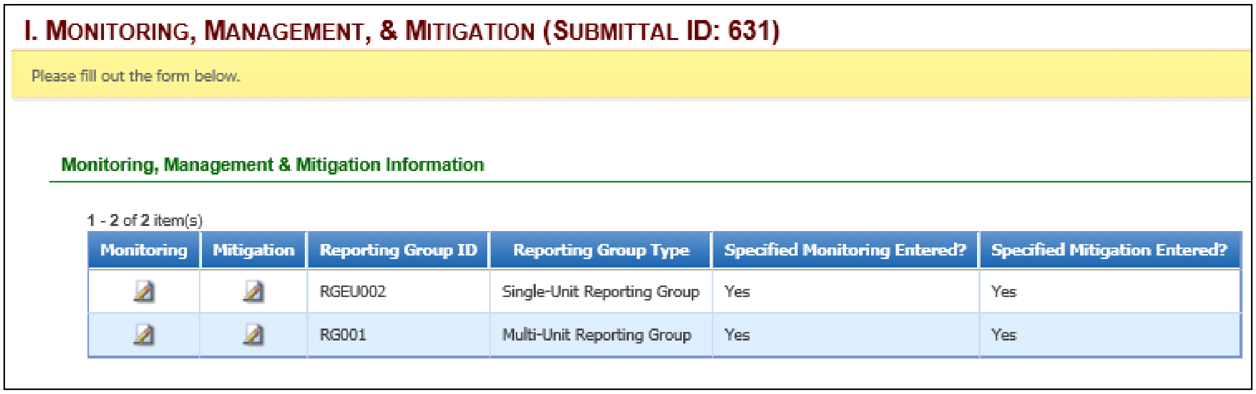
Add Pollutants | Batch Update | Exit

Emission & Activity Grid View

The system allows for the same pollutant to be entered in more than once in situations where the emissions reports may have different results for the same pollutant. The user can 'Batch Update' the groups if more than one have matching criteria.

11.3.1.9 Monitoring, Management, and Mitigation

Based on the emission reporting group, some groups will be required to complete additional information in the 'Monitoring, Management, and Mitigation'. If the indicator states 'No' in either of the 'Specified Monitoring Entered?' or 'Specified Mitigation Entered?' field, then no further action is required.


I. MONITORING, MANAGEMENT, & MITIGATION (SUBMITTAL ID: 631)

Please fill out the form below.

Monitoring, Management & Mitigation Information

1 - 2 of 2 item(s)

Monitoring	Mitigation	Reporting Group ID	Reporting Group Type	Specified Monitoring Entered?	Specified Mitigation Entered?
		RGEU002	Single-Unit Reporting Group	Yes	Yes
		RG001	Multi-Unit Reporting Group	Yes	Yes

Monitoring, Management, and Mitigation Grid View

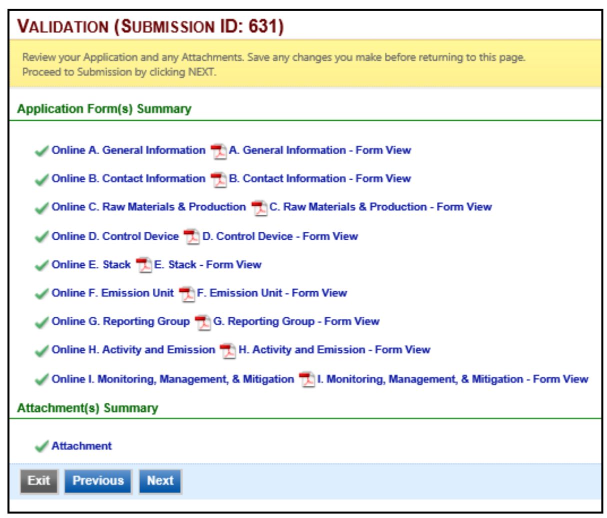
If the indicator displays 'Yes', then the user must click on the icon to enter in the required data. The user will have a prompt that will allow the user to specify the monitoring and mitigation method separately for each emission reporting group.

11.3.1.10 Data Validation

In the final step, SAAELIP will validate that all required inputs and sections were completed based on the validation rules required by the application forms.

If the application passes the validation checks, the user can then submit the application.

However, if any section fails to pass, SAAELIP will alert the user by marking the section with an 'X' and with a description of the reason why.


VALIDATION (SUBMISSION ID: 631)

Review your Application and any Attachments. Save any changes you make before returning to this page. Proceed to Submission by clicking NEXT.

Application Form(s) Summary

- Online A. General Information A. General Information - Form View
- Online B. Contact Information B. Contact Information - Form View
- Online C. Raw Materials & Production C. Raw Materials & Production - Form View
- Online D. Control Device D. Control Device - Form View
- Online E. Stack E. Stack - Form View
- Online F. Emission Unit F. Emission Unit - Form View
- Online G. Reporting Group G. Reporting Group - Form View
- Online H. Activity and Emission H. Activity and Emission - Form View
- Online I. Monitoring, Management, & Mitigation I. Monitoring, Management, & Mitigation - Form View

Attachment(s) Summary

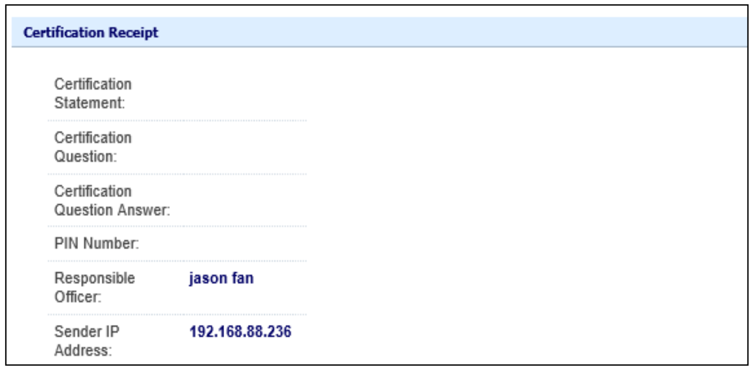
- Attachment

Exit Previous Next

AEL Validation Screen

11.3.1.11 Submission Receipt

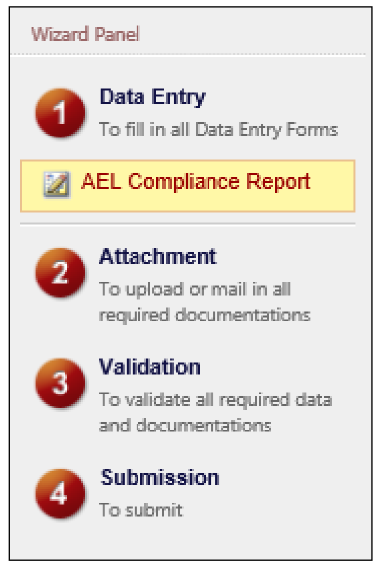
After the application is submitted, the user will receive a receipt confirming the submission and providing the user IP address.



Submission Receipt

11.3.2 Submit AEL Compliance Report

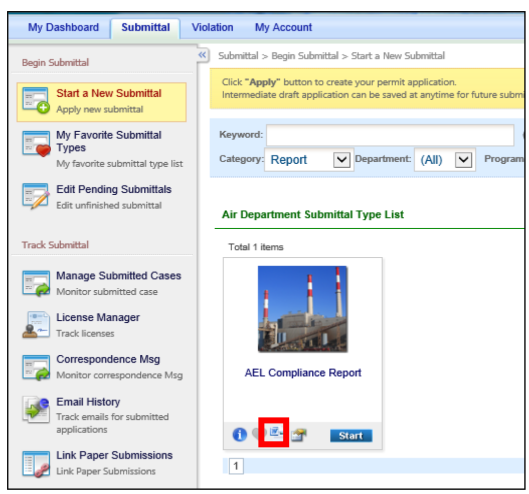
After approval of a facility's AEL License, the facility will be required to submit AEL Compliance reports. This allows for the Authority to monitor facilities and verify whether facilities are staying within the regulations of their license. Sometimes the Authority may receive a paper submission of the compliance report from the facility. An Authority User will be able to input the information from the compliance report into SAAELIP for the facility. The Authority will need to search for the application via their first name/last name, address, or the associated facility name. The Authority user will follow similar steps as the Facility would when entering a compliance report.



- Data Entry/AEL Compliance Report: This section contains the basic facility information such as the facilities addresses, phone number, and a place to add an executive summary or comments. The User must also enter the Licensing Authority that is associated to the particular license.
- Attachment: This is where the user will specify how they wish to submit their compliance report. The report can either be uploaded and submitted through SAAELIP or the User can choose to mail in the report via the address that is listed on the Attachment page. The User may upload any other supporting documents related to their compliance report.

Before beginning a new Compliance Report in SAAELIP, the user should download the Report through the 'Start a New Submittal' submodule in 'Submittal.' This will allow the User to fill out the report and later upload it to SAAELIP via the 'Attachment' step of the wizard. The User can download the document by clicking on the Word document icon.

The User can hold the cursor over the icons to view more information about what they do.

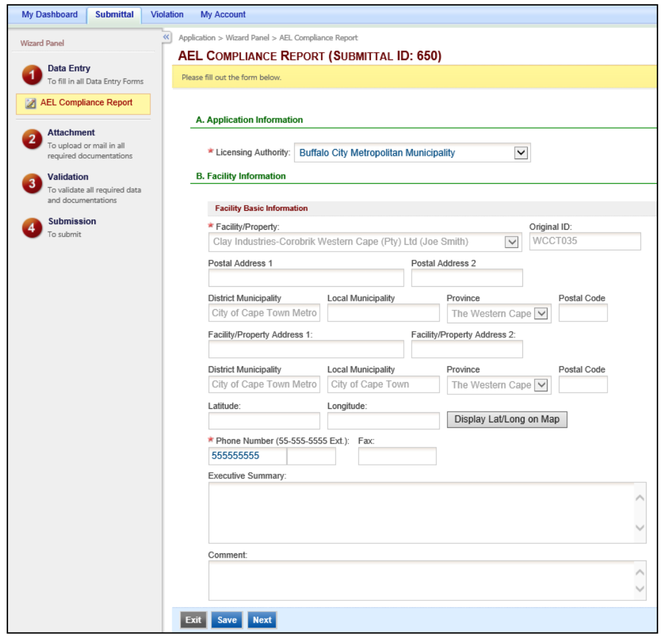


11.3.2.1 Data Entry

In this section, the User will verify all information that is entered on the screen is correct or will enter any required information that is not completed.

The User must associate a Licensing Authority to the compliance report.

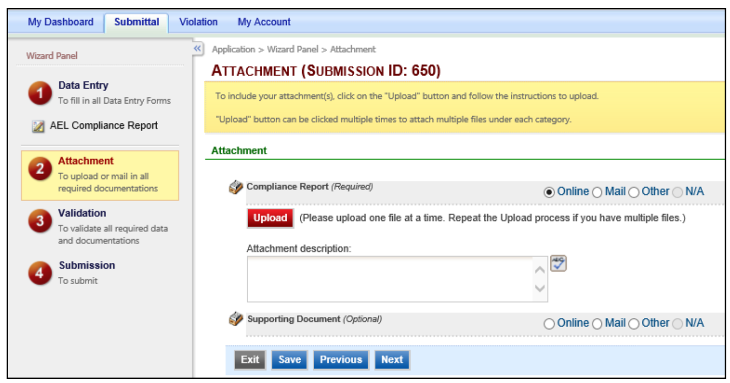
Any fields that contain a * as an icon is required to be filled or the system will generate a validation error.



AEL Compliance Report-Data Entry

11.3.2.2 Attachment

The User must attach the compliance report to the submission. SAAELIP provides the user to either digitally upload the report. The User has the option to upload supporting documents.



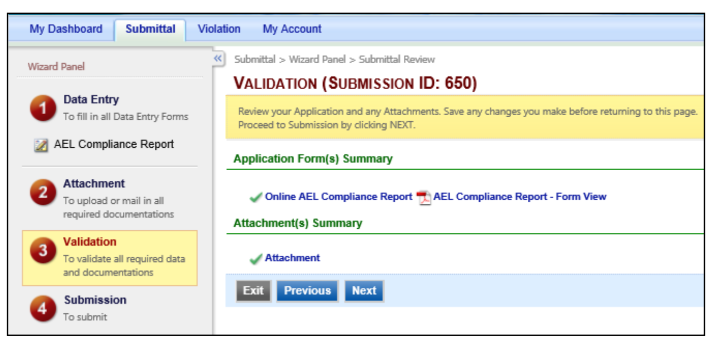
AEL Compliance Attachments

11.3.2.3 Data Validation

In the final step, SAAELIP will validate that all required inputs and sections were completed based on the validation rules required by the report forms.

If the application passes the validation checks, the user can then submit the report.

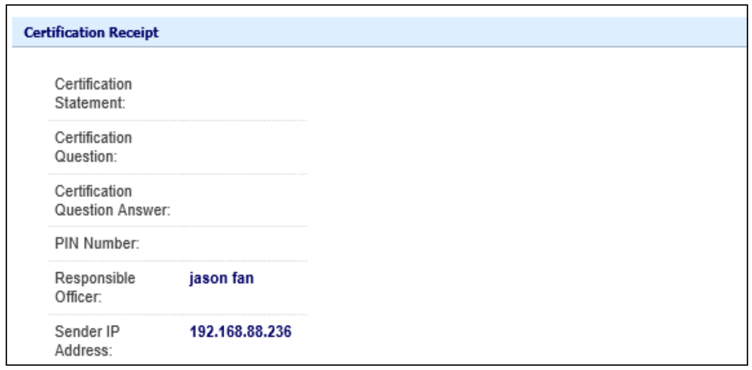
However, if any section fails to pass, SAAELIP will alert the user by marking the section with an 'X' and with a description of the reason why.



AEL Compliance Validation Screen

11.3.2.4 Submission Receipt

After the report is submitted, the user will receive a receipt confirming the submission and providing the user IP address.



Submission Receipt